No. 884,916. PATENTED APR. 14, 1908.

J. W. FISHER.

END GATE.

APPLICATION FILED JULY 23, 1907.

Fig. 2.

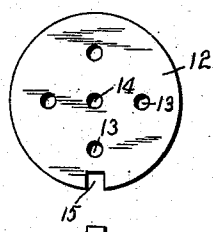
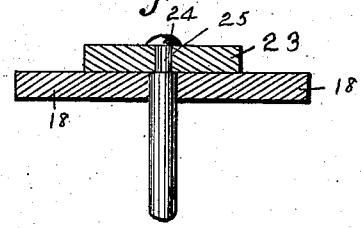


Fig. 4.



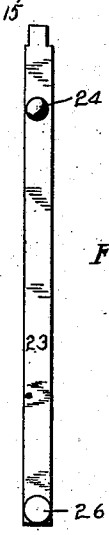


Fig. 3.

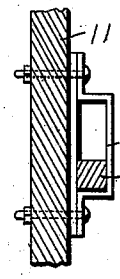
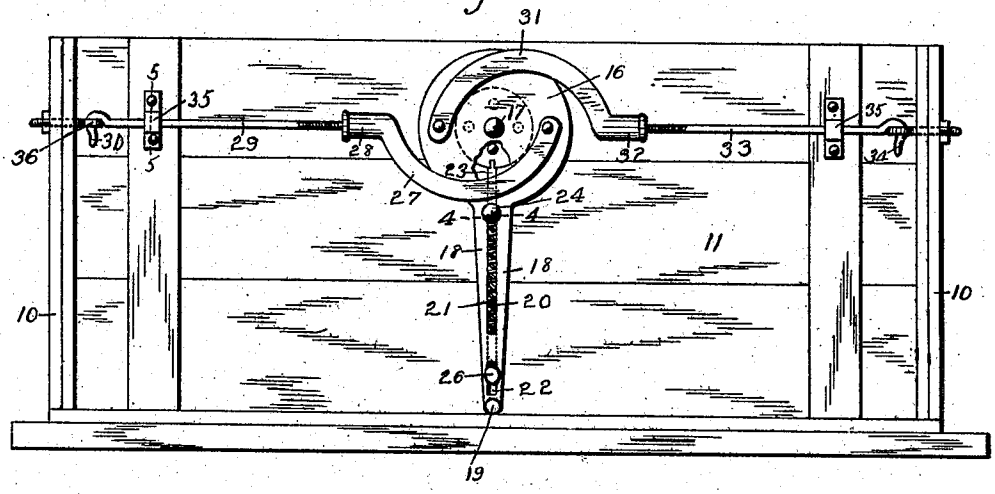


Fig. 5.

Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH W. FISHER, OF BRUNSWICK, NEBRASKA.

END-GATE.

No. 884,916. Specification of Letters Patent. Patented April 14, 1908.

Application filed July 23, 1907. Serial No. 385,171.

To all whom it may concern:

Be it known that I, JOSEPH W. FISHER, a citizen of the United States, residing at Brunswick, in the county of Antelope and State of Nebraska, have invented a certain new and useful End-Gate Fastener, of which the following is a specification.

The object of my invention is to provide an end gate fastener of simple, durable and inexpensive construction which may be quickly and easily attached to a wagon, and also quickly and easily placed in a locked position from which it cannot be moved by the ordinary shaking and jarring to which end gates are ordinarily subjected.

A further object is to provide means whereby the end gate may be quickly and easily removed from a wagon.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 shows a rear elevation of an end gate embodying my invention, attached to a wagon and in its locked position. Fig. 2 shows a detail view of the notched locking plate. Fig. 3 shows a rear view of the slide bolt. Fig. 4 shows an enlarged sectional view on the line 4—4 of Fig. 1, and Fig. 5 shows an enlarged sectional view on the line 5—5 of Fig. 1.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate that part of the wagon shown, and 11 indicates the body of the end gate. Both the wagon and end gate are of the ordinary construction now in general use. My improved fastening device comprises a locking plate 12 having openings 13 therein to receive bolts or screws for fastening it to the central portion of the rear of the end gate near the top thereof. In the center of the plate 12 is an opening 14 to receive a pivot pin, and at the bottom of the plate is a notch 15 to receive a slide bolt hereinafter described. Mounted on the rear of the plate 12 is a circular plate 16 pivotally connected with the plate 12 by the pivot pin 17 passed through the opening 14. Formed on the plate 16 is a downwardly projecting lever 18 having at its lower end a rearwardly projecting handle 19. This lever is provided with a longitudinal slot 20 in which is mounted an extensible coil spring 21, and near the bottom of the lever is a slot 22. Mounted in the rear of the lever 18 is a slide bolt 23 slidingly connected with the lever near its upper end by means of a rivet 24 passed through the slot 20, and through the slide bolt 23, and provided with a reduced portion 25, where it passes through the bolt 23, as clearly shown in Fig. 4. This bolt engages the upper end of the spring 21, the lower end thereof resting upon the lever 18 at the bottom of the slot 20 to normally hold the bolt 23 with its upper end in the notch 15. The bolt and lever are slidingly connected at their lower ends by means of the handle 26 that passes through the slot 22 and is attached to the slide bolt 23.

Pivotally connected to one side of the plate 16 is a curved arm 27, extending downwardly and then to the left, and then upwardly, and provided with a socket 28 in which a rod 29 is mounted, which rod is formed with a hook 30 on its end. Another curved arm is indicated by the numeral 31, and is pivoted to the side of the plate 16 opposite from the pivot point of the arm 27, and extends upwardly and then to the right and then downwardly, and has a socket 32 thereon to receive the rod 33. This rod is provided with a hook 34 on its end. Each of the rods 29 and 33 is extended through a bracket 35 attached to the rear of the end gate, and each of the hooks 30 and 34 is designed to enter an eye bolt 36 secured to the wagon.

In practical use, and assuming that it is desired to apply my improved end gate fastener to an ordinary wagon, and end gate, I place the eye bolt 36 in a wagon in the position shown, and then attach the plate 12 and the plate 16 to the rear of the end gate. Assuming the parts to be in the position shown in Fig. 1, it is obvious that the hooks will engage the eye bolt in such a manner as to firmly and securely hold the end gate in its position. The lever 18 is locked in its downwardly extending position by means of the bolt 23 in the notch 15 so that no amount of rattling or shaking to which an end gate is subjected will cause it to become loosened from its fastenings. However, if it is desired to remove the end gate, it is it only necessary for the operator to grasp the handles 19 and 26 in one hand, and move the handle 26 downwardly far enough to bring the slide bolt 23 out of the notch 15, whereupon

the lever 18 may be moved to the left, and the hooks 30 and 34 released from the eye bolts 36.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, therefor, is—

1. In a device of the class described, the combination of a notched plate designed to be secured to an end gate, a plate pivotally connected with the notched plate and having a downwardly projecting lever thereon, a spring actuated slide bolt carried by said lever and designed to automatically enter the notch in the notched plate when the lever is at its downward limit, a handle connected with the slide bolt for releasing it from the notched plate, two curved arms pivoted to the plate and extended across it in opposite directions, hooks at the outer ends of said arms designed to engage the sides of a wagon, and brackets for supporting the outer ends of said arms.

2. In an end gate fastener, the combination of eye bolts designed to be secured to a wagon, a notched plate designed to be secured to an end gate, a circular plate pivotally connected with the notched plate and having a downwardly projecting lever thereon, a handle at the lower end of said lever extending rearwardly, two curved arms pivoted to the circular plate and extended across the plate in opposite directions, and having hooks at their outer ends designed to enter said eye bolts, brackets for supporting said arms, a slide bolt connected with the lever, a handle on the lower end of the slide bolt adjacent to the handle of the lever, and designed to be grasped by the operator's hand, together with the handle on the lever, and a spring for normally holding the slide bolt with its upper end in the notch on the notched plate.

Des Moines, Iowa, July 10, 1907.

JOSEPH W. FISHER.

Witnesses:
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T. E. NAGEL.