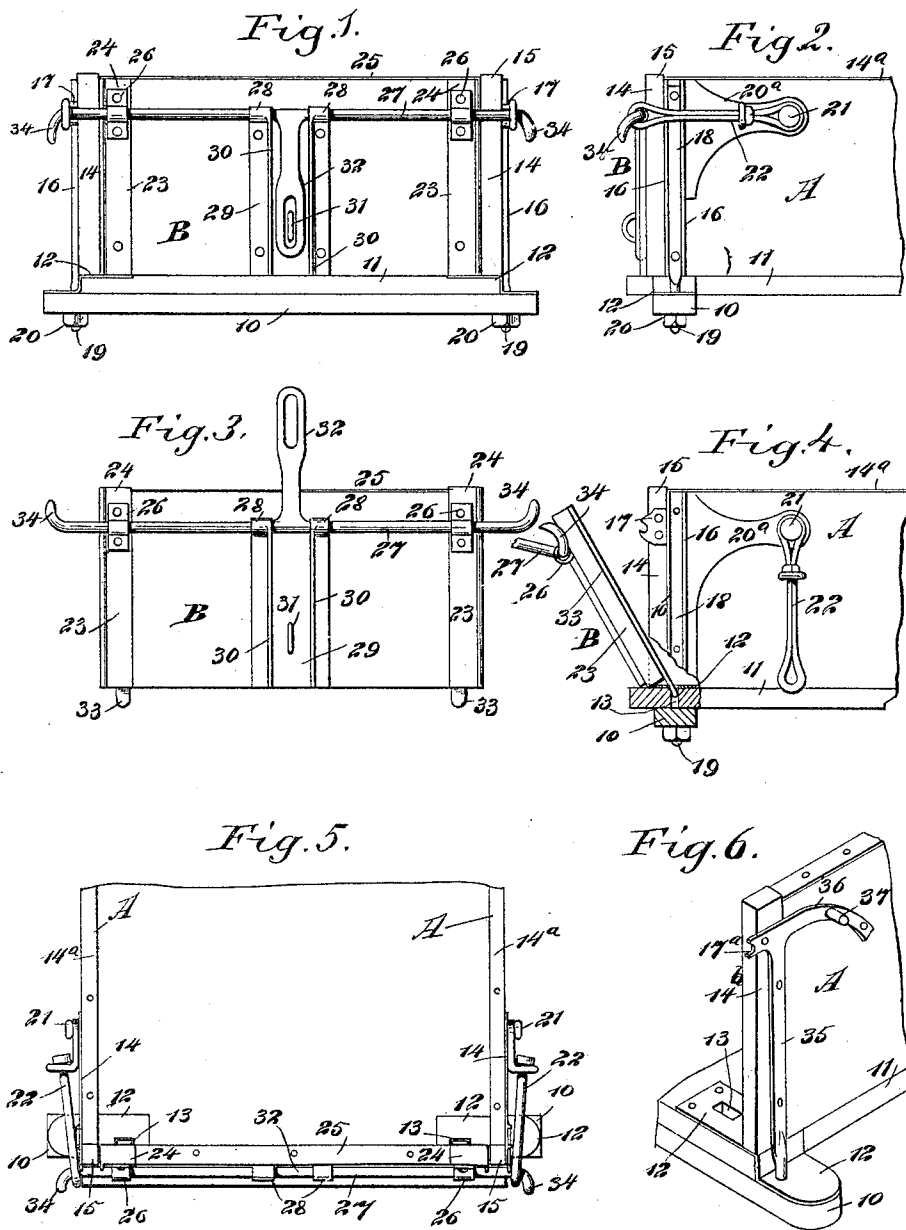


(No Model.)

C. SCHALLES.
WAGON END GATE.

No. 581,620.

Patented Apr. 27, 1897.



WITNESSES:

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WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 581,620, dated April 27, 1897.

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To all whom it may concern:

Be it known that I, CHARLES SCHALLES, of Cortez, in the county of Montezuma and State of Colorado, have invented a new and useful Improvement in Wagon-Bodies and End-Gates Therefor, of which the following is a full, clear, and exact description.

The object of the invention is to construct a wagon-body and an end-gate therefor, so that all battens and other projections liable to work loose or to be broken off will be discarded from the body, and to construct an end-gate capable of speedy application to or removal from the wagon-body, the connection between the end-gate and wagon-body being such that when the former is locked to the latter the sides of the wagon-body will fit closely to the ends of the end-gate and the bottom of the end-gate will tightly contact with the bed of the wagon-body.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a rear elevation of a wagon-body and the end-gate applied thereto, the end-gate being locked to the body. Fig. 2 is a side elevation of the rear portion of the wagon-body and an end-gate secured thereto. Fig. 3 is a rear elevation of the end-gate removed from the body of the wagon. Fig. 4 is a partial side elevation of the wagon-body and end view of the end-gate, the latter being partially open and a portion of the body being in section. Fig. 5 is a plan view of the rear portion of the wagon-body and improved end-gate; and Fig. 6 is a perspective view of a portion of the rear end of the wagon-body, illustrating a slight modification in the support for the lock which controls the end-gate.

In carrying out the invention at the rear end of the wagon-body A the usual cross-bar 10 is located, which extends beyond the sides of the wagon-body, the said cross-bar being secured to the bottom 11 of the body in any suitable or approved manner. A wear-plate 12 is secured to the upper face of the bottom of the wagon-body, and the said wear-plate is

carried downward along the outer side edges of the wagon-bottom, along the top of the projecting portions of the bottom 10, and in that portion of the wear-plate which is located on the inner face of the wagon-body an aperture or opening 13 is made. A bearing-plate 14 is attached to the outer face of each side-board of the body at the rear end, and the said bearing-plates extend over and embrace the ends of the side-boards and are provided with caps 15 at the top, which extend over and bear upon a strap-iron 14^a or other protective material which is attached to the upper edges of the wagon-body sides, preventing the possibility of the rear ends of the said strap-irons 14^a from being dislodged.

On the side face of each of the bearing-plates 14 preferably two ribs 16 are formed, and from each outermost rib, near the top, a bracket 17 is horizontally projected beyond the rear end of the said boards, the said brackets having recesses in their outer ends, as shown particularly in Fig. 4. A stay-bar 18 is located between the ribs 16 of each bearing-plate, and the lower ends 19 of the said stay-bars extend downward through openings in the outer ends of the wear-plates and in the projected portions of the rear cross-bar 10, being provided at their lower ends with suitable lock-nuts 20, so as to hold the side pieces firmly in engagement with the bottom or bed of the wagon-body.

An arm 20^a is forwardly projected from the upper forward edge of each of the bearing-plates 14, and at the forward end of each of these arms 20^a a stud 21 is secured, and each stud carries a link 22, which is constructed ordinarily in two sections having a swivel connection. The end-gate B is provided with a casing 23 at each of its ends, and these casings are preferably of metal and are U-shaped in cross-section, being provided at the top with a cap 24, which fits over the top protecting strip or strap 25, secured on the end-gate.

Upon the outer face of each of the casings 23, near the top, a bearing 26 is secured, and in these bearings a locking-bar 27 is journaled, the said bar being in the nature of a shaft, and this locking-bar is also journaled in bearings 28, formed at the upper end of a plate 29, placed vertically and centrally upon the outer face of the end-gate. This plate 29

is provided with two vertical ribs 30, and a staple 31 is located between the ribs. A crank-arm 32, provided with an eye, is formed integrally with or is attached to the central portion of the locking-bar 27, and when the said bar is in locking position, or in position to lock the end-gate to the wagon-body, the said crank-arm will extend downward in engagement with the central wear-plate 29 and the staple 31 will extend through the eye or opening in the crank-arm, enabling the arm to be secured in its lower position by means of a padlock or its equivalent.

Bars 33 are secured vertically to the inner face of the end-gate near its ends, and these bars extend downward below the lower edge of the end-gate, and when the end-gate is in position in the wagon-body the projecting portions of the bars 33 enter the apertures 13 in the body wear-plates 12, as illustrated in Figs. 4 and 5. The locking-bar 27 extends beyond the end portions of the end-gate, and the said locking-bar at each extremity is formed with a horn or curved member 34, the said horn or curved member being of somewhat spiral form. When the end-gate is placed in position on the wagon-body, the crank-arm of the lock-bar will be in the upper position, (shown in Fig. 3,) and the outer ends of the links 22, attached to the wagon-body, may then be readily passed over the curved extremities or horns 34 of the locking-bar, and by turning the crank-arm 32 downward on the end-gate the curved extremities or horns of the locking-bar will be carried rearward and downward, drawing the links tight and causing the sides of the body to fit snugly against the ends of the end-gate, and the locking-bar 27, which turns in the brackets 17 on the body of the wagon, when carried to a locking position, will also serve to crowd the end-gate downward, so that it will have a firm bearing on the bottom or bed of the vehicle, and this downward movement of the end-gate is mainly due to the bearings of the locking-bar in the said brackets and to the connection of the links 22 with the extremities of the locking-bar.

In Fig. 6 I have illustrated a slight modification in the bearing-plate shown in Figs. 2 and 4. In this modification the bearing-plate consists of a casing 14^b, which is fitted over the end and top portions of the side-bars of the wagon, and a vertical bar 35, the equivalent of the connecting-bar 18, is attached to the casing at the outer side and extends downward through the wear-plate 12 and the projection 10 of the rear cross-bar. At the top of this connecting-plate 35 a rearwardly-extending arm 36 is formed, provided with a stud 37, which is adapted to receive a link 22, as heretofore described, and a bracket 17^a is formed at the rear upper portion or edge of the connecting bars or plates 35, extend-

ing beyond the rear edge of the side-boards 65 of the body, the brackets 17^a being the equivalents of the brackets 17 shown in the other views.

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

1. The combination, of a wagon-body, bearing-plates attached to the side portions of the wagon-body, embracing the ends of the side-boards and the top, links pivotally connected with the said bearing-plates, and brackets rearwardly projected from the bearing-plates, an end-board provided with a rocking lock-bar, which lock-bar is journaled in the brackets of the said bearing-plates, the lock-bar terminating at its ends in crank-arms arranged to receive the links on the wagon-body, as and for the purpose specified.

2. The combination, of a wagon-body, bearing-plates attached to the side-boards of the wagon-body, and embracing the ends and top of the side-boards, links pivotally connected with the said bearing-plates, brackets rearwardly projected from the bearing-plates, an end-board provided with a rocking lock-bar, which lock-bar is journaled in the brackets of the said bearing-plates, the lock-bar terminating at its ends in crank-arms arranged to receive the links on the wagon-body, a central crank-arm attached to the lock-bar, and means, for fastening the central crank-arm of the lock-bar to the end-gate, as and for the purpose specified.

3. A wagon having a body portion and an end-gate, the body portion having a link capable of turning and swinging on the wagon-body and the end-gate having a lock-bar, one end of which is provided with a spiral-form crank-arm capable of being received in the link and of turning with the lock-bar to twist the link into fast connection with the lock-bar, substantially as described.

4. A wagon having a body portion and an end-gate, two brackets projecting rearwardly from the body portion, a rocking lock-bar carried by the end-gate and capable of being seated in the brackets, each end of the lock-bar having a spiral-form crank, and two links pivotally connected to the body portion, the links respectively receiving the crank-arms and the lock-bar being capable of turning to hold the links, substantially as described.

5. The combination with two separable parts, of a link capable of turning and swinging on one part, and a rock-shaft carried on the second part and having a spiral-form crank capable of engaging with the link, and moving with the shaft to hold the two parts together, substantially as specified.

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Witnesses:

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