

(No Model.)

L. C. SWEET.
WAGON END GATE.

No. 529,819.

Patented Nov. 27, 1894.

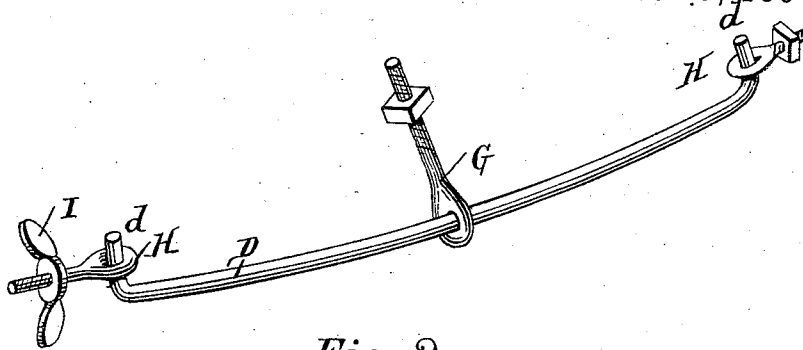


Fig. 2.

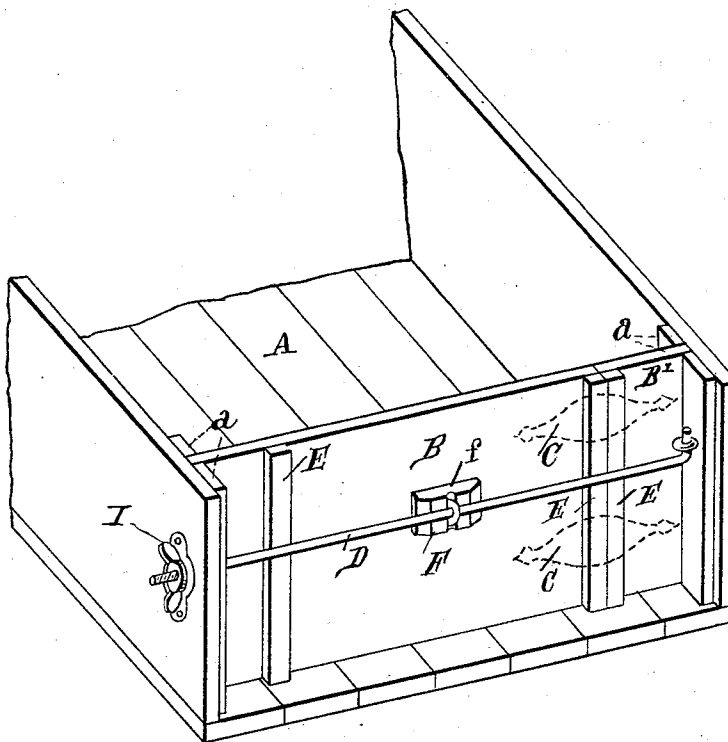


Fig. 1.

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UNITED STATES PATENT OFFICE.

LARNTINE C. SWEET, OF LOAMI, ILLINOIS,

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 529,819, dated November 27, 1894.

Application filed October 30, 1893. Serial No. 489,525. (No model.)

To all whom it may concern:

Be it known that I, LARNTINE C. SWEET, a citizen of the United States, residing at Loami, in the county of Sangamon and State of Illinois, have invented a certain new and useful Improvement in End-Gates for Wagons, of which the following is such a full, clear, and exact description as will enable those skilled in the art to which it pertains to make and use my said invention.

The purposes of my invention are to provide an end gate so constructed and adapted to be connected with the wagon bed that the end gate may be securely held in position on the wagon bed thereby avoiding the constant rattling and the wear on the bed which is a great objection to end gates as heretofore commonly constructed; also to provide novel and effective means whereby the end gate may be quickly connected with the bed or detached therefrom.

My invention consists of certain novel features of construction and combinations of mechanism, herein shown, described and specifically claimed, reference being had to the annexed drawings, in which—

Figure 1— is a perspective view of the end gate in position in the end of the wagon bed. Fig. 2— is an enlarged detached view of the spring rod by means of which the end gate is connected with the wagon bed and shows the eye bolt connecting the rod with the end gate in position on the rod.

Similar letters indicate similar parts in both of the views.

The wagon bed A is of ordinary construction and only so much thereof is shown as is necessary to illustrate the connection of the end gate with the bed. Near the ends of the sides of the bed are guides *a* which serve to retain the gate in position on the bed. The end gate proper consists of two sections B and B' joined by hinges C on the inside of the gate.

I do not confine myself to the particular form of hinge shown as any suitable hinge may be used without departing from my invention.

Vertical cleats E are secured to both sections of the end gate and serve to strengthen same. They also bear against the rod D thereby serving to prevent the gate from being forced

outward by the pressure of the load within the bed.

The preferable method of constructing the end gate is as follows: A board of requisite length and width is prepared. The cleats E are then secured to the board in the required position by screws or other suitable means, that cleat adjacent to the hinges being double the width of the other cleat. A saw cut is then made through the board and the wide cleat on the longitudinal central line of the cleat. The hinges are then placed in position to connect the sections of the gate with each other. By this means perfect adjustment of the sections relative to each other is attained and the risk of splitting the board at the end of the sections in attaching the cleats is obviated. The block F, which is the same thickness as the cleats E, is secured to the section B in any convenient position. A horizontal central hole pierces the block F and the section B. In the block F is a transverse cavity *f* adapted to receive the head of the eye bolt G and prevent the bolt from turning in the block. The eye bolt G, which is of ordinary construction, passes through the block F and the section B and connects the rod D with the end gate.

The rod D is of springy material and is normally curved as shown in Fig. 2, and has upturned ends *d* adapted to enter eye bolts H connected with the sides of the wagon bed. One of the eye bolts H is provided with a thumb screw or tail nut I which in case the sides of the bed are pressed apart by the load within the bed may be unscrewed, thereby permitting the eye of the bolt to be placed in position to readily receive the adjacent upturned end of the bolt D. The thumb screw I may then be tightened to draw the sides of the bed together.

Ordinarily the end gate may be connected with or detached from the wagon bed without using the thumb screw I.

The operation of attaching the end gate to the wagon bed is as follows: the gate is inserted between the guides *a*. One part of the rod D is then pressed down until the upturned end *d* on that part is in position to enter the eye of the adjacent bolt H. The end *d* is then inserted in the adjacent eye. In like manner the other part of the rod D is then pressed down until the end *d* on that part enters the

eye of its adjacent bolt H. The rod D will then be in a horizontal position and the resilient action of the rod will serve to press the end gate down on and hold it firmly against the bottom of the wagon bed, thereby preventing rattling and undue wear of the parts. To detach the end gate from the wagon bed the operation is the reverse of that just described. If from any cause the position of the eye bolts H relative to each other becomes such that the ends *d* will not conveniently enter the eyes of the bolts or that the ends *d* move too freely in the eyes, the position of the eye bolts may be adjusted by means of the thumb screw I as already described.

I am aware that hinged end gates have heretofore been used. I therefore do not broadly claim an end gate consisting of two sections hinged together, but placing the sections together in such manner that the adjacent ends of the sections shall abut firmly against each other and placing abutting cleats on the adjacent ends of the sections of such thickness that the cleats shall bear firmly against the cross rod connecting the sides of the wagon bed is of the essence of my invention.

I am aware that centrally supported spring

rods exerting pressure in the longitudinal direction of the wagon bed have heretofore been used on end gates, also that centrally supported spring rods have been used to operate locking bolts on end gates. I therefore do not broadly claim a centrally supported spring cross bar but confine myself to the structure herein set forth and specifically claimed.

What I claim as my invention, and desire to secure by Letters Patent, is—

In an end gate the means adapted to retain the lower edge of the end gate in contact with the bottom of the wagon bed, to wit: a spring cross-bar adapted to press the end gate downward by the resilient action of said cross bar; in combination with the board or main structure of the end gate, means adapted to connect said spring cross bar with said board or structure and means adapted to detachably connect the ends of said cross bar with the sides of the wagon bed, as set forth.

In witness whereof I have hereunto subscribed my name, at Springfield, Illinois, this 7th day of October, A. D. 1893.

LARNTINE C. SWEET.

Witnesses:

GEO. A. HALEY,
THOS. H. CHENEY.