Oct. 7, 1924. 1,510,798

L. POE

RODLESS WAGON BOX

Filed July 7, 1922

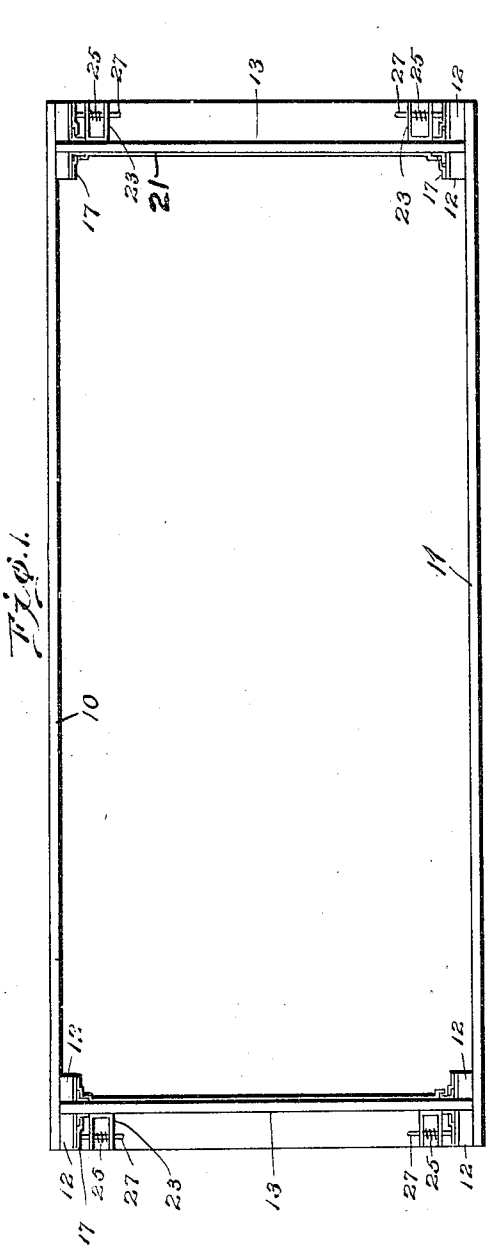


Fig. 1.

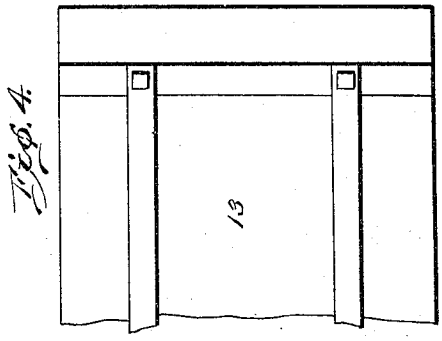


Fig. 4.

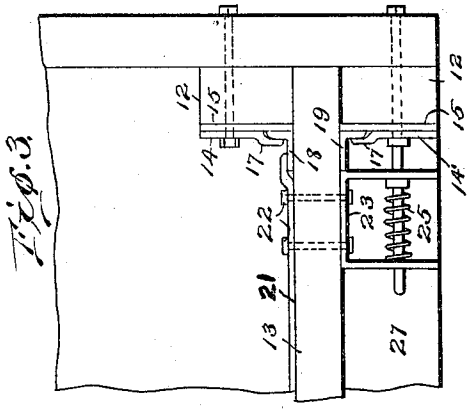


Fig. 3.

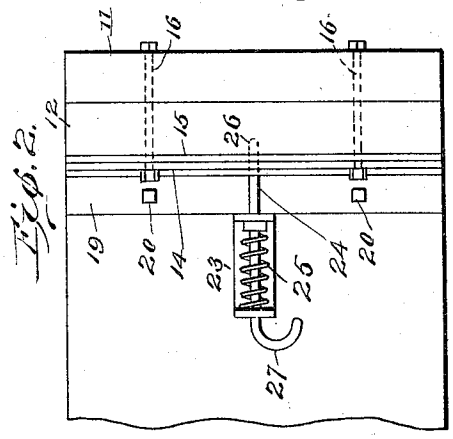


Fig. 2.

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Patented Oct. 7, 1924. 1,510,798

UNITED STATES PATENT OFFICE.

LESLIE POE, OF CLEVELAND, MISSISSIPPI.

RODLESS WAGON BOX.

Application filed July 7, 1922. Sreial No. 573,282.

To all whom it may concern:

Be it known that I, LESLIE POE, a citizen of the United States, residing at Cleveland, in the county of Bolivar and State of Mississippi, have invented new and useful Improvements in Rodless Wagon Boxes, of which the following is a specification.

This invention has reference to wagon boxes and particularly to an improved end gate and fastener therefor.

An object of the invention is to eliminate the long and objectionable draw rods heretofore employed to hold the end gate in position and to substitute therefor a simple and efficient fastener which can be readily loosened at any time to permit convenient removal of the end gate with the wagon in any position.

A further object of the invention is to provide an end gate fastener of improved and simple design and embodying parts few in number and easy to construct; the said fastener being of such a character as to be readily attachable to any end gate of the usual draw rod type in replacement for the said rods without requiring any alteration of either the end gate or the wagon box.

With these and other objects in view, which will become apparent as the description proceeds, the invention resides in the construction, combination and arrangement of parts, hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which like characters of reference indicate like parts throughout the several figures, of which:

Figure 1 is a plan view of the proposed wagon box.

Figure 2 is a detail view of a corner section of the box, disclosing units of the end gate fastener in side elevation.

Figure 3 is a similar view showing the parts in top plan, and

Figure 4 is a view showing the reinforcements for the male fasteners of the end gate.

In carrying out the purposes and objects of the invention, the side boards 11 of the wagon box are provided at each end with a pair of vertical cleats 12 of wood spaced apart the required distance to form the usual slot or groove for the removal of end gate 13. It is to be observed that each end of the wagon box is similarly constructed and that there is an end gate at both the front and rear ends of the box. Each gate is held in place by suitable fasteners which, in the present instance, comprise a plurality of male and female fastenings.

The female fastenings consist of two metallic face plates 14 and 14′ arranged respectively on opposite sides of the slot for the end gate and extending lengthwise of the cleats 12; each plate being backed up by a thin plate 15 of steel or other suitable metal and both face and backing plates being bolted together, as at 16, to the wooden cleats. The inner longitudinal edge portions of the face plates are curved outwardly from the backing plates and extend in spaced parallel relation therewith, as indicated at 17, to provide vertical slots to receive the male fasteners of the end gate. It will thus be seen that there is provided both a wooden faced slot and a steel faced slot for the male fasteners to fit into.

The male fasteners include a pair of angle plates 18 and 19 respectively bolted, as at 20, on opposite sides of the end gate and adjacent each end thereof, the said plates being parallel with the vertical edges of the gate and spaced inwardly therefrom a distance substantially corresponding to the depth of the slot between cleats 12. When the end gate is in place, as shown in Figure 3, angle plates 18 and 19 engage in the slots formed by the backing plates 15 and the curved portions of their respective face plates 14 and 14′, thus bracing the end gate on each side of the box. The male fasteners of the end gate are reinforced by two metallic connecting strips 21 that extend from one angle plate 18 to the other corresponding plate. These reinforcing strips are preferably located adjacent the upper and lower edge, respectively, of the end gate, so as to relieve the strain on the wood part of the gate and are secured to the angle plates by means of the bolts 20.

Fastened at each end of the gate, just back of angle plate 18, by means of bolts 22, is a U-shaped bracket 23 which provides a rack for the plunger 24 to work through. Plunger 24 is provided with a spring 25 which is normally tensioned to force the plunger into a hole or socket 26 extending through the female fastenings on the side boards of the wagon box. This opening, in connection with the plunger, forms a lock for holding the end gate substantially in place. To release the gate the plunger is withdrawn from the opening against the

tension of the spring by means of its curved handle-end 27 and is given a half turn so that the curved end will be caused to bend against the outer face of the gate, thereby retaining the plunger in retracted position and enabling the end gate to be conveniently removed.

As will be apparent from the preceding, the pieces of the end-gate fastener are very simple and easy to construct, and of a character adapting them to be either incorporated as an integral part of the construction of specially built end gates or applied as an attachment to convenional types of end gates already in use in substitution or replacement for the draw fasteners thereof, as previously explained.

From the foregoing it is thought that the advantages and novel features of the invention may be readily understood and that further detailed description thereof is not required.

In practice, I have found that the form of my invention illustrated in the accompanying drawings and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize that various minor changes in details or construction, proportion and arrangement of parts, may be resorted to within the scope of the appended claims without departing from or sacrificing any of the principles of this invention.

Having thus described my invention, and without enumerating variations and equivalents, what I desire protected by Letters Patent is as set forth in the following claim:

In a wagon box, in combination a wooden end gate, wooden cleats bolted to the wagon box to provide slots in which the ends of the gate are adapted to be received, a female fastener secured to each cleat and comprising a metallic face plate and a metallic backing plate relatively spaced apart along one edge to provide a slot between the plates, a plurality of metallic male fastenings carried by the said end gate for engagement with the said female fastenings of the cleats, said male fastenings respectively comprising a metallic angle plate having engagement in the slot of a female fastener, metallic strips connecting certain of the said angle plates and extending crosswise of the gate from one edge thereof to the other to strengthen the parts against strain, a U-shaped bracket arranged adjacent each end of the gate on the outside of the latter and secured thereto just back of the said angle plates, and a spring pressed plunger supported in the bracket with one end engageable in a socket in a female fastener to lock the gate in place, said plunger having a curved handle end movable into binding engagement with the gate to hold the plunger retracted from the socket.

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Witnesses:
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