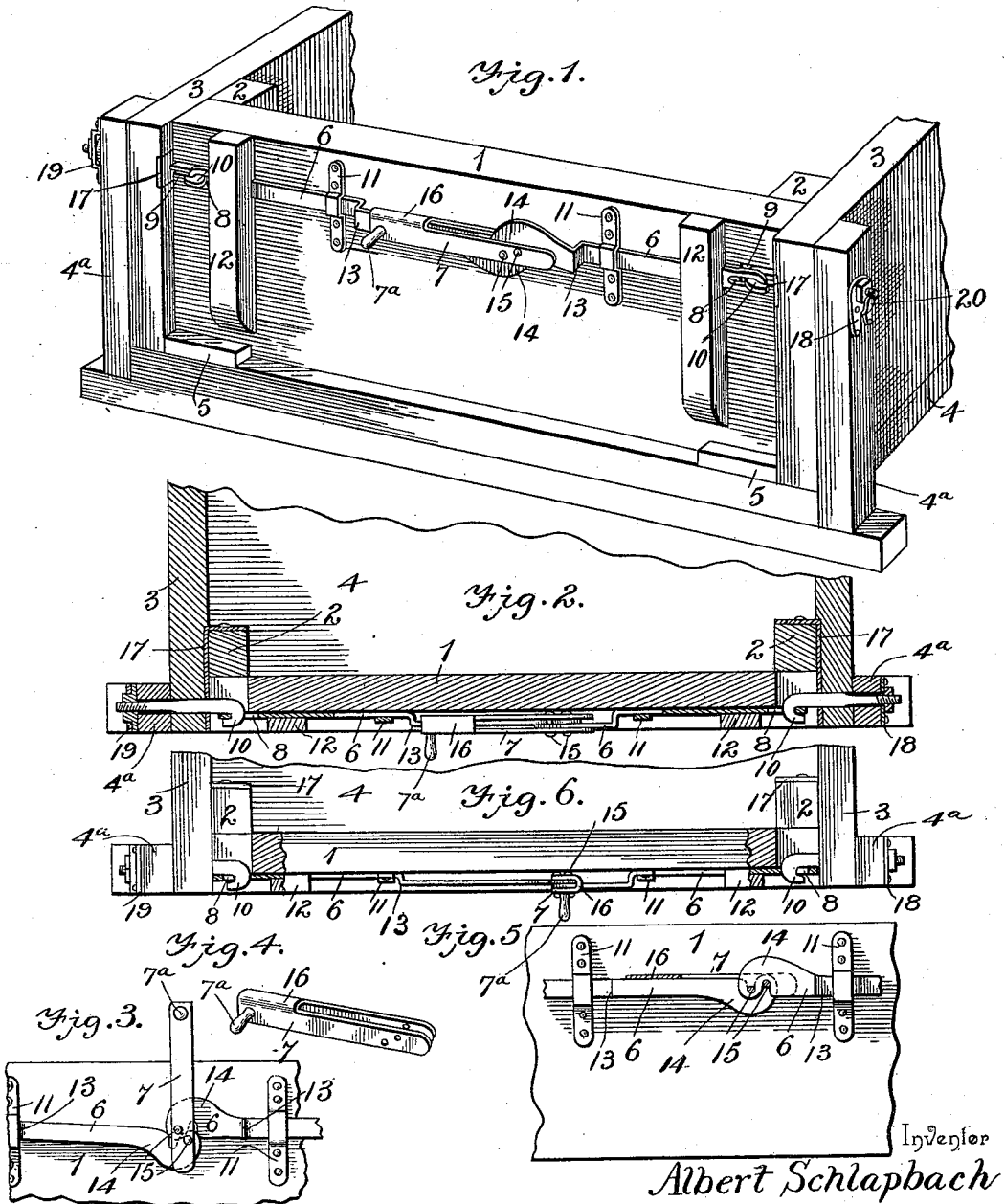


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A. SCHLAPBACH.
END GATE FASTENER.
(Application filed Nov. 30, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ALBERT SCHLAPBACH, OF SCANDIA, KANSAS.

END-GATE FASTENER.

SPECIFICATION forming part of Letters Patent No. 610,332, dated September 6, 1898.

Application filed November 30, 1897. Serial No. 660,255. (No model.)

To all whom it may concern:

Be it known that I, ALBERT SCHLAPBACH, a citizen of the United States, residing at Scandia, in the county of Republic and State of Kansas, have invented a new and useful End-Gate Fastener, of which the following is a specification.

This invention relates to improvements in end-gate fasteners.

The object of the present invention is to improve the construction of end-gate fasteners and to provide a simple, strong, and efficient one capable of securely locking an end-gate on a wagon-body and adapted to permit the same to be quickly removed when desired.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of an end-gate fastener constructed in accordance with this invention and shown applied to a wagon-body. Fig. 2 is a horizontal sectional view. Fig. 3 is a detail view of the end-gate, showing the fastener unlocked. Fig. 4 is a detail perspective view of the connecting-lever. Fig. 5 is a detail sectional view taken longitudinally of the end-gate fastener and showing the position of the parts when locked. Fig. 6 is a plan view, partly in section, the fastening device being unlocked.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates an end-gate supported by inner vertical cleats 2, secured to the inner faces of the sides 3 of a wagon-body 4 and located contiguous to the inner face of the end-gate, and the bottom of the wagon-body is provided with blocks or cleats 5, arranged to support the lower edge of the end-gate. The rear portion of the wagon-body is further supported by vertical cleats 4^a, arranged on the outer faces of the sides 3, at the rear ends thereof. The end-gate has slidably mounted on it a pair of bars 6, connected at their inner ends to a lever 7 and provided at their outer ends with openings 8, arranged adjacent to slots 9 of the end-gate and adapted to engage hooks 10 of the wagon-body. The bars 6 are mounted in guides 11 and in recesses or openings of

vertical cleats 12, and their inner portions are outwardly offset by angular bends 13 to form stops for abutting against the guides 11. 55

The inner ends 14 are oppositely curved or hook-shaped to provide inner recesses and are connected by pivots 15 to the lever 7, which is composed of two sides connected at their upper ends at 16. The pivots 15 are received within the recesses of the bars 6 when the locking or connecting lever is arranged horizontally and the pivoted ends of the bars are carried beyond the center, whereby the parts are securely held in their locked position. When the parts are locked, the inner ends of the bars 6 overlap each other partially, the opening between the sides of the lever being sufficient to permit such operation. The connecting portion 16 of the lever forms a stop and abuts against the adjacent bar when the parts are locked, and a suitable handle 7^a is provided for facilitating the manipulation of the lever. The lever 7 is preferably constructed of a single piece of metal which is centrally split from one end to within a short distance from the other end to provide the connecting portion 16, and it is then folded longitudinally to form the two sides. 75

The hooks 10, which are provided with flattened shanks, are held in proper position to be engaged by the outer ends of the bar 6 by means of guide-plates 17, secured to the inner faces of the sides of the wagon-body and extended around the front faces of the cleats 2. The guide-plates are provided with slots to receive the flattened shanks of the hooks, and these slots are slightly enlarged centrally to permit the passage of the threaded portions of the shanks. The threaded portions of the shanks are engaged by nuts, which are held on the shanks by suitable keepers 18 and 19, which swivel the nuts to the body. The keeper 18, which engages an ordinary nut, consists of a plate provided with a perforation to receive the threaded shank and having a tongue 20, which extends over the outer face of the nut. This construction permits a free rotation of the nut to adjust the hook, but prevents the nut from screwing off the shank when the hook is stationary, as is the case when the end-gate is locked. The keeper 19, which engages a flanged nut, has an angularly-bent outwardly-offset central por- 80 90 100

tion, which is provided with an opening to receive the body portion of the nut, the flange engaging the inner face of the keeper.

The end-gate is securely locked when closed and may be readily taken out without removing the end-gate of a top box when such is employed, and it will be seen that the locking mechanism is simple, strong, and durable, that it is easily manipulated, and that it cannot become accidentally unfastened by any jolting of the vehicle.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a device of the class described, the combination with a wagon-body provided with cleats and having inwardly-extending hooks, and an end-gate provided with slots to receive the said hooks and having guides, of a fastening device comprising a pair of oppositely-disposed bars slidingly mounted in the guides and provided at their outer ends with openings arranged opposite the slots and engaging said hooks, said bars being provided at their inner ends with recesses and having angular bends forming stops to engage the guides, and a lever pivoted to the inner ends

of the bars and composed of two sides connected at their upper ends and receiving the bars between them, substantially as described.

2. In a device of the class described, the combination with a wagon-body provided at the inner faces of its sides with cleats, guide-plates provided with slots and secured to the inner faces of the sides of the body, hooks projecting from the inner faces of the sides of the wagon-body and having shanks arranged in said slots, nuts located on the exterior of the body and engaging the shanks, keepers mounted on the body and engaging the nuts, an end-gate fitting against the cleats and provided with slots to receive the hooks, and a locking device comprising the sliding bars having openings to engage the hooks, and a lever pivoted to the inner ends of the bars and forming a lock, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALBERT SCHLAPBACH.

Witnesses:

GUST NELSON,
J. W. GOODRICH.