(No Model.)

E. E. HANKEN.

END GATE FOR WAGONS.

No. 591,531. Patented Oct. 12, 1897.

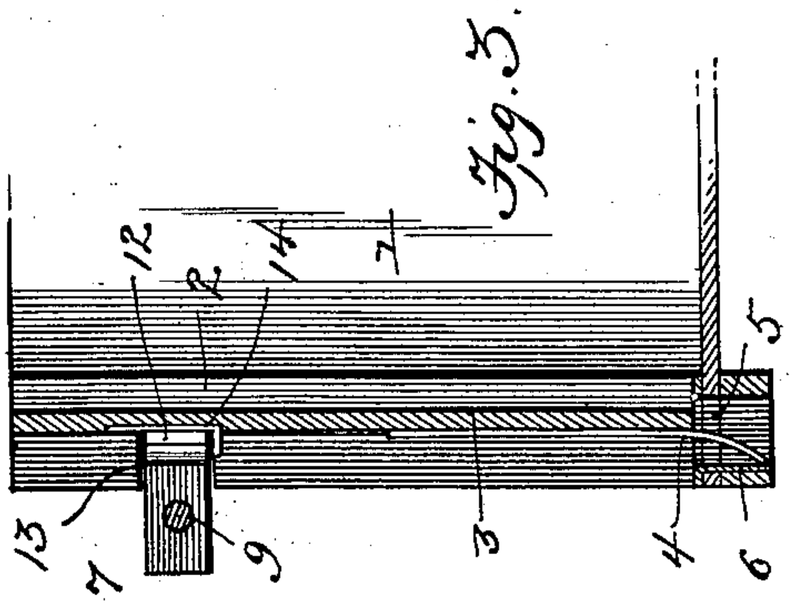

Fig. 3.

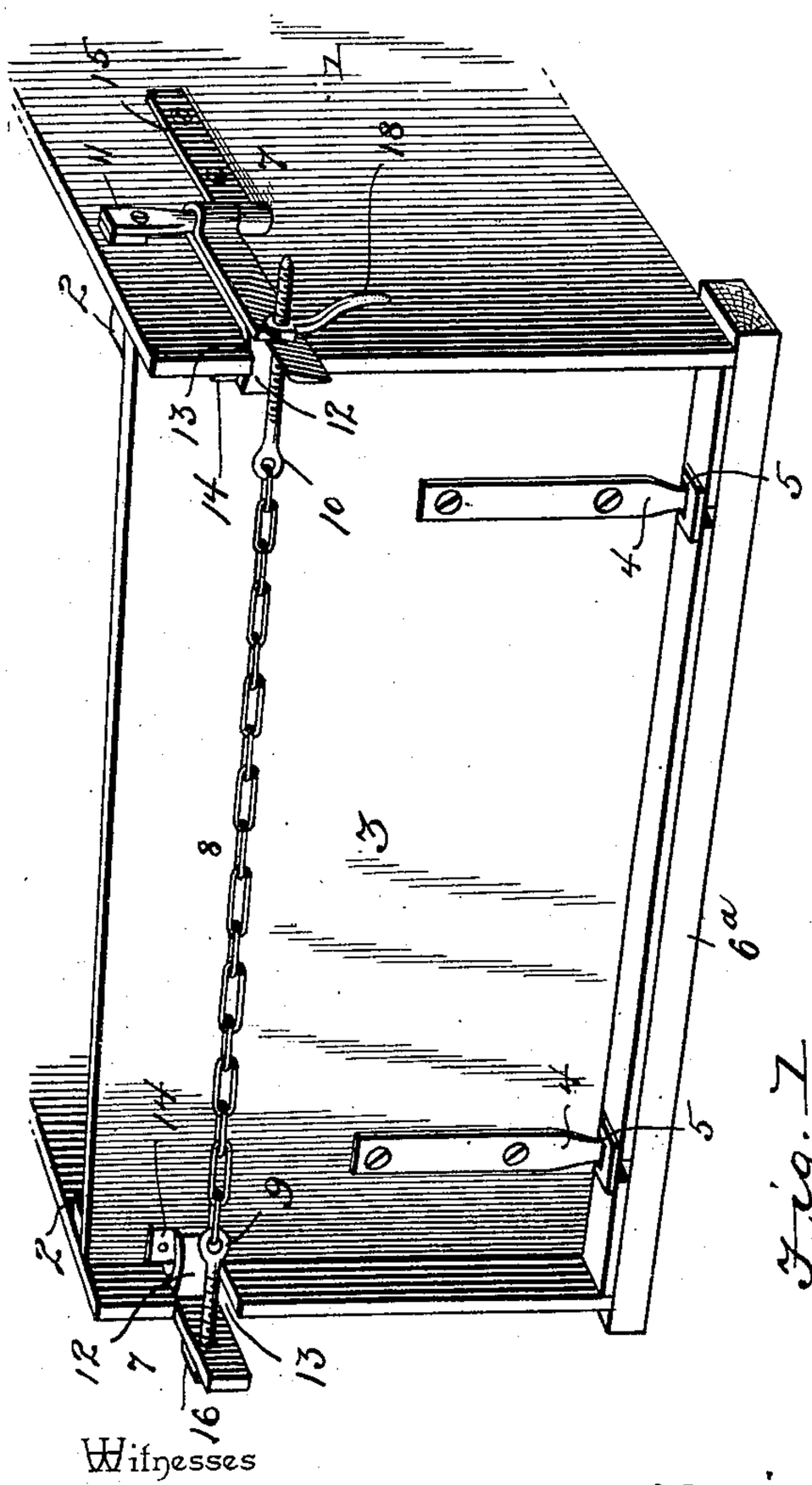

Fig. 1.

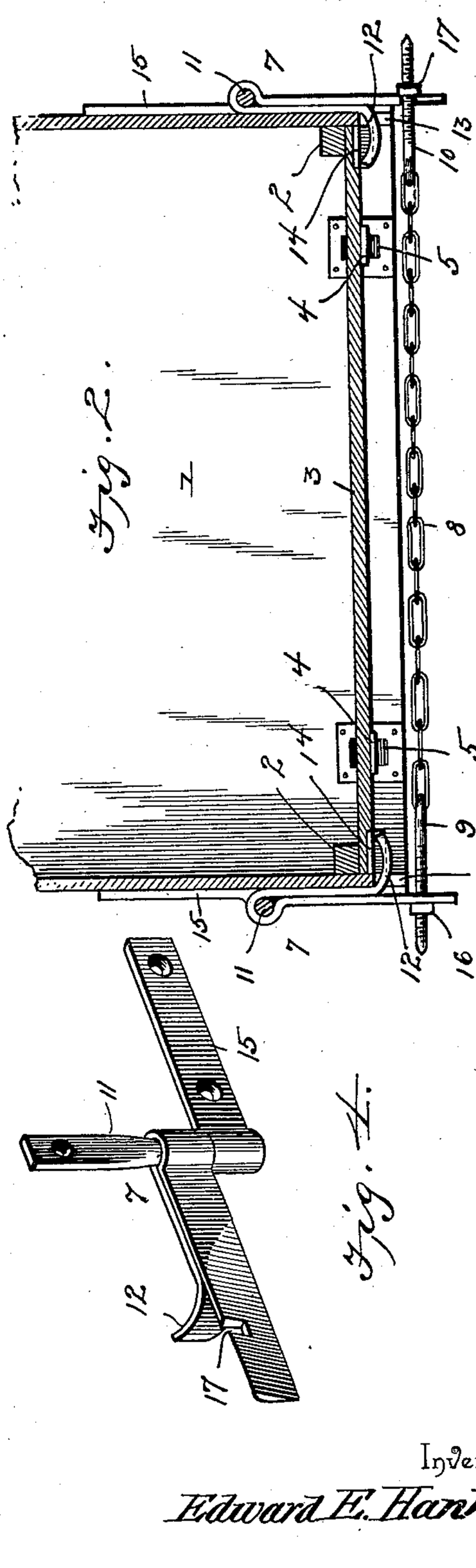

Fig. 2.

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD E. HANKEN, OF WAGGONER, ILLINOIS.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 591,531, dated October 12, 1897.

Application filed January 20, 1897. Serial No. 619,975. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. HANKEN, a citizen of the United States, residing at Waggoner, in the county of Montgomery and State of Illinois, have invented a new and useful End-Gate, of which the following is a specification.

The invention relates to improvements in end-gates.

The object of the present invention is to improve the construction of end-gates and to provide a simple and efficient one which will be securely held in its closed position, and which may 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 drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a wagon-body provided with an end-gate constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a vertical sectional view. Fig. 4 is a detail perspective view of one of the locking-levers.

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

1 designates a wagon-body provided at the inner faces of its sides with vertical cleats 2, against the outer edges of which is arranged an end-gate 3, which is provided at its lower end with depending lugs 4, engaging sockets 5 of the bottom of the wagon-body. The sockets 5 preferably consist of longitudinal slots, the bottom of the wagon-body being reinforced by plates, which are provided at their front ends with depending flanges 6. The flanges 6 consist of the metal cut out of the plates to form the slots, and they serve to reinforce the bottom cleat 6^a of the wagon-body. The lugs 4 are preferably formed integral with plates, which are suitably secured to the outer face of the end-gate.

The end-gate, which is adapted to swing outward and downward from the wagon-body, is retained in its closed position by locking-levers 7, which are connected by a chain 8 and eyebolts 9 and 10.

The locking-levers, which are arranged on the outer faces of the sides of the wagon-body, are hinged at their inner or front ends to vertical pintles 11, being provided with eyes for the reception of the same, and they are also provided at points between their ends with inwardly-extending curved arms 12, which form hooks, and which engage the outer face of the end-gate. The curved arms extend through slots or openings 13 of the sides of the wagon-body and engage plates 14, secured to the outer faces of the end-gate, and provided at their lower ends with horizontal flanges, which interlock or engage the lower edges of the arms 12, whereby the end-gate is locked against upward movement when it is engaged by the levers 7.

The pintles may be mounted in any suitable manner, and in the accompanying drawings they are offset from the wagon-body at their upper ends by suitable blocks, and their lower ends are arranged in eyes of plates 15.

One of the locking-levers is provided with a perforation for the reception of the eyebolt 9, which is provided with an ordinary nut 16, and the other eyebolt 10, which is connected with the adjacent end of the chain 8, is arranged in a notch or recess 17 of the other locking-lever, and is provided with a nut 18, having a suitable handle. The outer face of the locking-lever, which is provided with the notch 17, is beveled toward its lower edge, and the nut 18 is also beveled, whereby when the chain is drawn taut by the screwing of the nut 18 the latter will be firmly interlocked with the lever and held against accidental displacement.

The tension on the locking-levers holds the end-gate firmly against the cleats of the wagon-body and prevents it from wearing or rattling.

It will be seen that the locking mechanism is simple and comparatively inexpensive in construction, that it is capable of securely holding an end-gate and of preventing the same from rattling, and that it is applicable to any ordinary wagon-body, and also to the end-gates of top boxes.

What I claim is—

1. In a device of the class described, the combination with a wagon-body provided at the inner face of each of its sides with a cleat, and an end-gate arranged against the cleats, of a pair of horizontal levers fulcrumed at

their front ends on the outer faces of the sides of the wagon-body and provided between their ends with inwardly-extending arms engaging the rear face of the end-gate at each side of the wagon-body and holding the said gate against the cleats, and means for connecting the locking-levers, whereby the arms are held in engagement with the end-gate, substantially as described.

2. In a device of the class described, the combination of a wagon-body provided at the inner faces of its sides with cleats, an end-gate arranged against the same and provided with horizontal flanges, locking-levers fulcrumed at their front ends on the outer faces of the sides of the wagon-body and provided between their ends with inwardly-extending arms engaging the rear face of the end-gate at points above said flanges, whereby the end-gate is locked against upward and outward movement, and connections between the rear portions of the levers for holding the arms in engagement with the end-gate, substantially as described.

3. In a device of the class described, the combination of a wagon-body, an end-gate provided with horizontal flanges, locking-levers fulcrumed on the sides of the wagon-body and provided between their ends with arms engaging the outer face of the end-gate directly above the said flanges, whereby the end-gate is locked against upward and outward movement, bolts mounted on the levers at the outer ends thereof, one of the bolts being detachably interlocked with its lever, nuts arranged on the bolts and means for connecting the latter, substantially as described.

4. In a device of the class described, the combination of a wagon-body, an end-gate, horizontal levers hinged to the outer faces of the sides of the wagon-body and provided with arms extending inward and engaging the end-gate, one of the levers being provided with a perforation and the other having a notch and beveled at its outer face, eyebolts passing through the perforation and the notch, means for connecting the bolts, and nuts arranged on the bolts, one of the nuts having its inner face beveled and coöperating with the beveled face of the lever, substantially as and for the purpose described.

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

EDWARD E. HANKEN.

Witnesses:
W. H. RIPLEY,
H. GILMAN.