

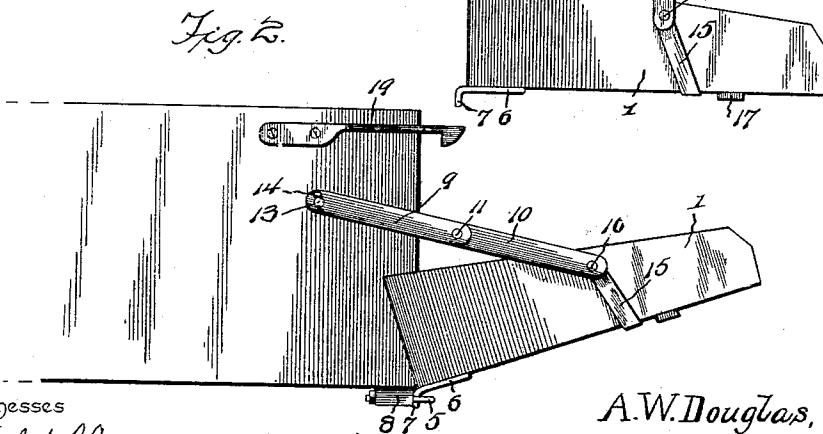
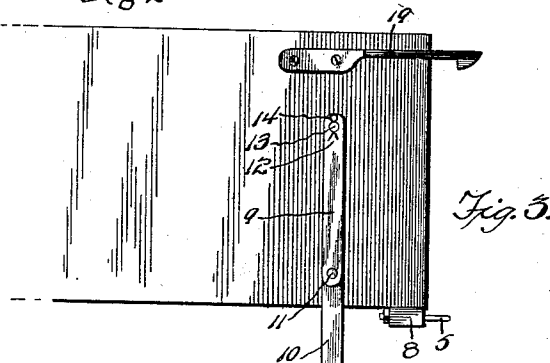
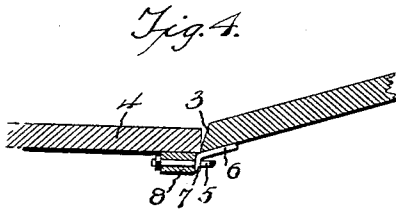
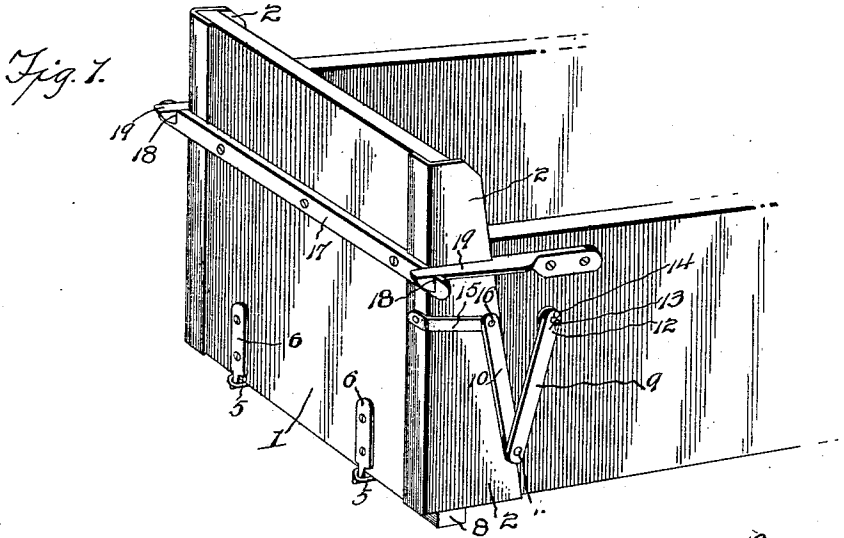
No. 633,756.

Patented Sept. 26, 1899.

A. W. DOUGLAS.
WAGON END GATE.

(Application filed Apr. 17, 1899.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

ANDREW W. DOUGLAS, OF LODA, ILLINOIS.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 633,756, dated September 26, 1899.

Application filed April 17, 1899. Serial No. 713,334. (No model.)

To all whom it may concern:

Be it known that I, ANDREW W. DOUGLAS, a citizen of the United States, residing at Loda, in the county of Iroquois and State of Illinois, have invented a new and useful Wagon End-Gate, of which the following is a specification.

The invention relates to improvements in wagon end-gates.

The object of the present invention is to improve the construction of wagon end-gates and to provide a simple, inexpensive, and efficient one adapted to be securely locked in its closed position and capable of being readily arranged to form a shoveling-board or for dumping.

A further object of the invention is to provide a connection between the end-gate and the wagon-body adapted to permit the former to be placed upon the latter or hang beneath the same without disconnecting it therefrom.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim 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 side elevation of the same, the end-gate being arranged to form a shoveling-board. Fig. 3 is a similar view showing the end-gate arranged beneath the wagon-body. Fig. 4 is a detail sectional view illustrating the construction of the hinge for detachably connecting the lower edge of the end-gate with the bottom of the wagon-body.

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

1 designates an end-gate provided at its side edges with wings 2 and having its lower edge 3, which is beveled, detachably hinged to the bottom of the wagon-body 4 by means of staples 5 and plates 6, which are provided with hooks 7, forming pintles and engaging the eyes or openings of the staples. The staples, which project beyond the rear edges of the bottom of the wagon-body, are secured to a bottom cross-bar or cleat 8, as clearly illustrated in Fig. 4 of the accompanying draw-

ings. When the end-gate is lowered to an inclined position to form a shoveling-board, as illustrated in Fig. 2 of the accompanying drawings, the beveled lower edge 3 of the end-gate fits against the rear edge of the bottom of the wagon-body and the hooks interlock with the lower face of the said bottom, whereby the end-gate is securely retained in position.

The end-gate is connected with the sides of the wagon-body by links 9 and 10, arranged in pairs, as shown, and having their adjacent ends pivoted together by a rivet 11 or other suitable fastening device. The front link 9 of each pair has its upper end 12 perforated to form an eye for the reception of a pivot 13, mounted on the wagon-body and extending horizontally therefrom, and the said link 9 is detachably connected to the body by means of a split key 14, passing through a suitable perforation of the pivot 13 and arranged at the outer face of the link. The rear link 10 is pivoted at its outer end to the adjacent wing, which is reinforced by a metal strap 15, and the pivot 16 passes through both the strap and the wing and serves to secure the same together. The rear end of the strap is bent at right angles and is secured to the rear face of the end-gate, and the wings, which are preferably constructed of sheet metal or similar material, have their rear edges secured to the rear face of the end-gate.

Secured to the rear face of the end-gate is a transverse bar 17, preferably constructed of metal and arranged adjacent to the upper edges of the sides of the wagon-body, and the ends of the bar, which extend laterally from the wings to form projections or lugs, are provided at their upper edges with recesses 18, adapted to be engaged by resilient catches 19 of the wagon-body. The resilient catches 19, which are located at opposite sides of the wagon-body, consist of resilient shanks provided at their outer ends with heads and having plates or enlargements at their inner or front ends, and these plates or enlargements are perforated for the reception of fastening devices for securing the catches to the wagon-body. The heads of the catches are beveled to enable the projecting ends of the cross-bar 17 to engage them automatically, and the inner edges of the heads form shoulders for

locking the cross-bar against outward or rearward movement.

The end-gate, which is adapted to be arranged in a vertical position, as illustrated in 5 Fig. 1 of the accompanying drawings, may be lowered to an inclined position for shoveling, as shown in Fig. 2, and its lower edge can also be disconnected from the bottom of the wagon-body to permit the contents of the 10 latter to be dumped. The end-gate is also adapted to hang beneath the wagon-body, as shown in Fig. 3, and it may be swung upward over the wagon-body without detaching it from the same. This construction enables 15 the end-gate to be arranged out of the way when loading the wagon-body with stock or material.

The invention has the following advantages: The end-gate, which is simple and 20 comparatively inexpensive in construction, is strong and durable and adapted to be arranged at an inclination to form a shoveling-board, and it is also adapted to be placed above or beneath the wagon-body without detaching it from the same. It greatly facilitates 25 loading and unloading, and it will permit the contents of a wagon-body to be readily dumped.

Changes in the form, proportion, size, and the minor details of construction within the 30 scope of the appended claim may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

The combination with a wagon-body, of an 35 end-gate detachably hinged at its lower edge to the wagon-body at the bottom thereof and provided at opposite sides with wings, links arranged in pairs at opposite sides of the wagon-body and pivoted to the same and to 40 the end-gate, projections or lugs extending laterally from opposite sides of the end-gate, and the resilient catches mounted on the outer faces of the sides of the wagon-body at points in advance of the wings and arranged to en- 45 gage the projections or lugs automatically when the end-gate is swung upward, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 50 the presence of two witnesses.

ANDREW W. DOUGLAS.

Witnesses:

FRANK F. BUTZOW,
WARREN S. GOODELL.