J. W. SLY. END GATE.

No. 423,348. Patented Mar. 11, 1890. Witnesses John H. Sly. By Zis attorneys

## UNITED STATES PATENT OFFICE.

JOHN W. SLY, OF RHODES, IOWA, ASSIGNOR OF ONE-HALF TO ALBERT F. LYNN, OF SAME PLACE.

## END-GATE.

SPECIFICATION forming part of Letters Patent No. 423,348, dated March 11, 1890.

Application filed January 8, 1890. Serial No. 336,286. (No model.)

To all whom it may concern:

Be it known that I, John W. Sly, a citizen of the United States, residing at Rhodes, in the county of Marshall and State of Iowa, 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 provide means for holding the end-gate of a wagon securely in its vertical or closed position, and in its horizontal position when used as a shoveling-board, which means shall be simple and inexpensive in construction and adapted to be readily applied to the ordinary construction of wagon and end-gate.

My invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated 20 in the accompanying drawings, and pointed

out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a wagon provided with my improvements, the end-gate being shown in its horizontal position ready for shoveling. Fig. 2 is a side elevation of the same, the end-gate being shown in its vertical or closed position. Fig. 4 is a detail view of one of the side bars. Fig. 3 is a detail perspective view of the ends of the side bar and the connecting-bar.

Referring to the accompanying drawings, 1 designates the body of a wagon which has hinged to it an end-gate 2, which is provided 35 at its sides with wings 3. The end-gate 2 has pivoted to it near its upper end, by means of a rod 4, connecting-bars 5, which extend along the sides of the body and have their free ends 6 bent up at an angle and pro-40 vided with an opening 7, in which are arranged side bars 8, that are secured to the sides of the body of the wagon and extend longitudinally along the said sides within a short distance of their top edges. The ends 45 6 of the connecting - bars 5 slide back and forth on the horizontal side bars 8, and when the end-gate is in its vertical or closed position the ends 6 are adapted to engage recesses 9, near the front ends of the side bars

prevent it being accidentally opened or lowered to its horizontal position and to retain the end 6 in the recess 9. The connectingbar is provided near its upturned enlarged end with a spring 10, that is arranged be- 55 tween the connecting-bar and the side bar, and has its free end bearing against the free end of the latter. By this construction the parts are securely retained in their locked position and prevented becoming accident- 60 ally displaced therefrom. The side bars 8 are provided at their ends with curved arms or hooks 11, that are adapted to extend over the upper edge of the sides of the wagonbody and engage the same, the ends of the 65 hooks or arms 11 being sufficiently long to obtain a firm hold upon the inside of the wagon.

In order to prevent the side bars moving longitudinally along the sides of the wagon 70 the rear hooks are arranged between two cleats 12, which are secured to the inner faces of the sides of a wagon near the rear ends of the same. These parallel cleats are generally found upon wagons having tilting end- 75 gates, and it will readily be seen that the mechanism for holding the end-gate in its raised and lowered position is adapted to be readily secured to a wagon of ordinary construction without any previous preparation 80 of the latter, the side bars being readily hung over the sides of the body, and the connecting-bars, being provided with eyes in their rear ends, can be quickly pivoted to the endgate.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

Having thus described my invention, what 90

I claim is—

sides of the body of the wagon and extend longitudinally along the said sides within a short distance of their top edges. The ends adapted to engage the upper edge of a wagon-body and having a recess 9, arranged near 95 forth on the horizontal side bars 8, and when the end-gate is in its vertical or closed position the ends 6 are adapted to engage recesses 9, near the front ends of the side bars 50 8, to retain the end-gate in that position and bar, said end being adapted to slide on the 100

side bar and engage the recess 9, and a spring on the connecting-bar and arranged between the side bar and the connecting-bar, and having its free end adapted to bear against the lower edge of the former and retain the end in said recess, substantially as described.

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

JOHN W. SLY.

Witnesses:

G. A. WALKER,

M. BREWER.