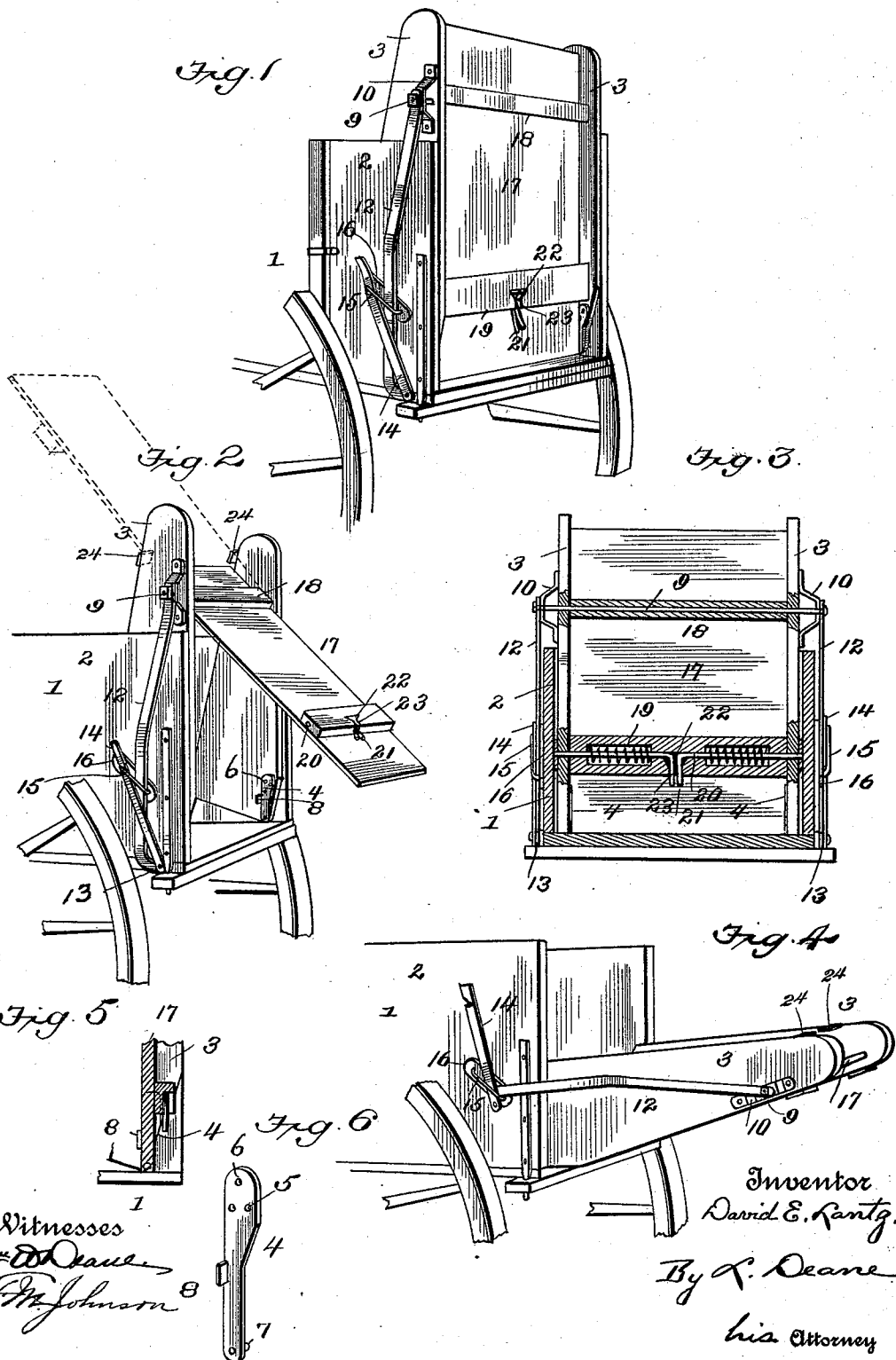


(No Model.)

D. E. LANTZ.
END GATE FOR WAGONS.

No. 534,652.

Patented Feb. 26, 1895.



UNITED STATES PATENT OFFICE.

DAVID EDGAR LANTZ, OF MATTOON, ILLINOIS.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 534,652, dated February 26, 1895.

Application filed March 19, 1894. Serial No. 504,294. (No model.)

To all whom it may concern:

Be it known that I, DAVID EDGAR LANTZ, a citizen of the United States, residing at Mattoon, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in End-Gates for Wagons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to end gates for wagons designed for carrying grain loose or in bulk, although it may be used with advantage with all descriptions of wagons or similar vehicles.

The object of the invention is to provide an end gate which when shut will effectually close the end of the wagon, and when desired the tail board of the same can be swung outwardly for the purpose of removing the contents. The end gate can also be turned outwardly so as to form a shoveling board for receiving the grain as it is shoveled from a car or other structure and directing it to the wagon.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of the rear end of a wagon constructed according to my invention the end gate and tail board being closed. Fig. 2 is a similar view the end gate being closed and the tail board swung outwardly or opened. Fig. 3 is a cross sectional view. Fig. 4 is a perspective view showing the end gate lowered to form a shoveling board. Fig. 5 is a detail sectional view. Fig. 6 is a detail perspective view of one of the brackets to which the end gate is secured.

In the said drawings the reference numeral 1, designates the body of a wagon and 2, the sides thereof which may be of any ordinary or suitable construction.

The numeral 3, designates the sides of the end gate, having inclined rear edges and straight front edges. At their lower ends near the rear thereof there are secured to these side pieces metal brackets consisting of standards 4, having apertures for the passage of securing screws or rivets 5. At their upper ends these brackets are formed with slots 6, to receive the ends of the rods for holding or

locking the tail board when closed, as will be hereinafter described. The lower ends of these standards project down into recesses in the wagon body and are pivotally connected with said body by means of pivots 7, secured thereto. The standards are also formed at their front edges with inwardly extending flanges 8, against which the tail board abuts when closed.

At their upper ends the sides of the end gate are connected together by a stationary transverse rod 9, the ends of which pass through plates 10, secured to the outer sides of the side pieces. Connected with this rod are downwardly extending bars 12, having their lower ends bent rearwardly at a right angle forming lugs 13, to which are pivoted a bar 14, the upper end of which passes through a loop 15, of a casting 16, secured to the side of the wagon. The upper end of this bar 14, is formed with a notch adapted to engage with the upper end of said loop for a purpose hereinafter explained.

The numeral 17, designates the tail board having a transverse bar 18, near its upper end through which the rod 9, passes and which forms a journal or pivot therefor. Near its lower end the tail board is provided with a transverse cleat 19, having a central bore in which are located two outwardly extending rods 20. The inner ends of these rods are bent at a right angle forming arms 21, which project through a V-shaped aperture 22, in said cleat when the tail board is swung outwardly or opened. Intersecting this aperture is a rectangular slot 23, with which said arms engage when the tail board is closed. The outer ends of these rods are adapted to project into the slots 6, in the standards 4.

The operation is as follows: When in the position shown in Fig. 1, the end gate and tail board are closed, the lower end brackets of the sides of the gate projecting down into the recesses in the wagon bed or bottom, the tail board resting against the flanges 8, of the brackets and the rods 20, extended outwardly so that their ends will engage with the slots in said brackets, the notches in the bars 14, engaging with the upper ends of the loops 15, and locking the end gate in place.

To open the end gate, the arms 21, are turned upwardly out of engagement with slot

23, into the opening 22. They are then pulled inwardly unlocking the tail board which can then be swung outwardly as seen in Fig. 2.

To use the device as a shoveling board the 5 tail board is closed and locked and the bar 14, disengaged from the loop 15, when the end gate can be swung downwardly on its pivots until it assumes the position shown in Fig. 4, when the bars 12 and 14, will be in the position also shown in said figure, the lugs 13, en- 10 gaging with the lower ends of loop 15, and holding the end gate in position.

Secured to the upper ends of the end gate are inwardly projecting catches 24, which 15 serve as stops for the tail board whereby when the latter is opened and inverted as shown by dotted lines Fig. 1, they will support the tail board in such position.

Having thus described my invention, what 20 I claim is—

1. The combination with a wagon, of the end gate comprising the sides pivoted to the wagon bed, the pivoted tail board, the downwardly extending bars connected with the 25 upper end of the end gate, having their ends

bent rearwardly forming lugs, the notched bar pivoted to said lugs and the loops secured to the wagon body with which said lugs and notched bars engage, substantially as described.

2. In a wagon, the combination with the 30 end gate, the brackets secured thereto formed with slots and their lower ends projecting into recesses in the wagon bed, the pivots for connecting said brackets with the wagon bed, 35 and the rods for locking said tail board when closed, of the downwardly extending bars secured to the pivot of said tail board, having their lower ends bent rearwardly forming lugs, the notched bars pivoted to said lugs and the 40 loops connected with the wagon with which said notched bars and lugs engage, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID EDGAR LANTZ.

Witnesses:

EDDIE GUCKER,
BRYAN H. TIVNEN.