(No Model.)

T. G. MANDT.

COMBINED END GATE AND SHOVELING BOARD.

No. 459,156. Patented Sept. 8, 1891.

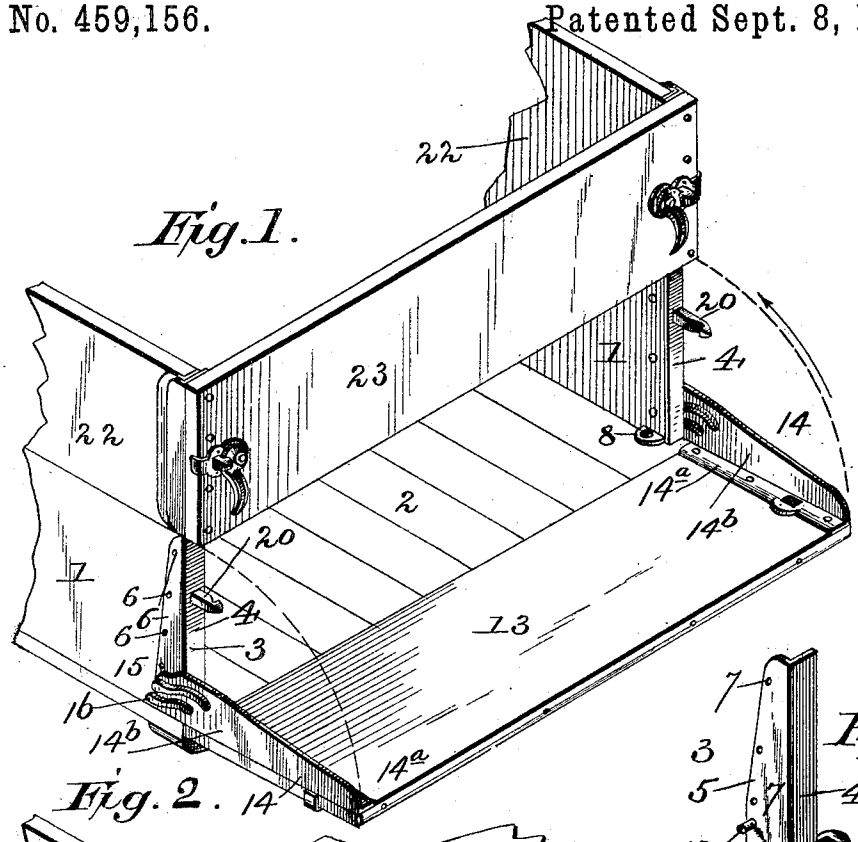

Fig. 1.

Fig. 2.

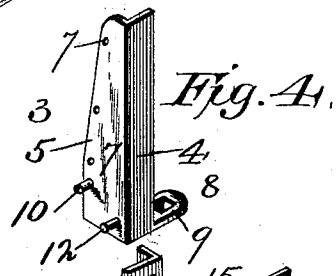

Fig. 4.

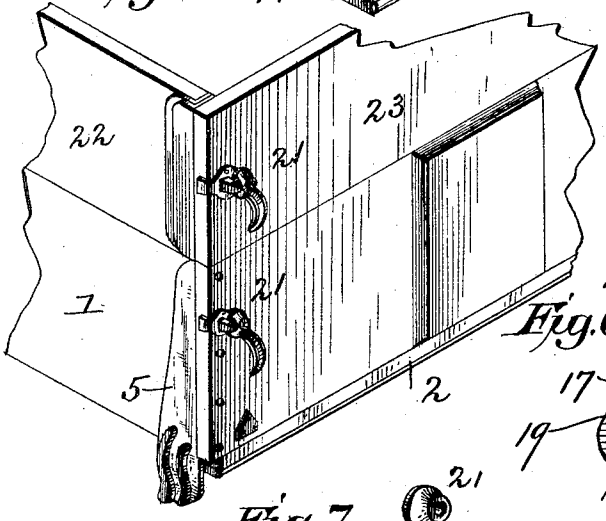

Fig. 7.

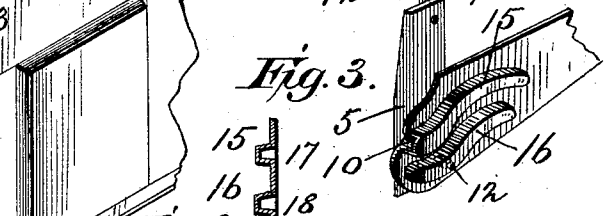

Fig. 3.

Fig. 6.

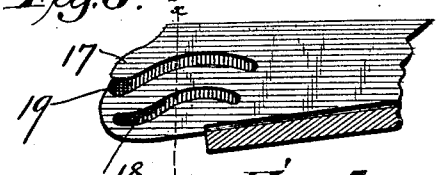

Fig. 5.

WITNESSES:

F. L. Ourand

Jos. L. Coombs

INVENTOR:

Targe G. Mandt,

by Sawin Dagger & Co.

Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN.

COMBINED END-GATE AND SHOVELING-BOARD.

SPECIFICATION forming part of Letters Patent No. 459,156, dated September 8, 1891.

Application filed March 26, 1890. Serial No. 345,305. (No model.)

To all whom it may concern:

Be it known that I, TARGE G. MANDT, a citizen of the United States, and a resident of Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in a Combined End-Gate and Shoveling-Board for Vehicles; and I do hereby declare that the following is 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.

The invention relates to improvements in end-gates for wagons, the object being to provide a simple and efficient construction of the same, whereby the gate when let down will assume a horizontal position, so as to form a shoveling-board, and which may also be let down still farther, so as to assume a vertical position and be out of the way when loading the wagon.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of an end-gate constructed in accordance with my invention, the same being shown in position to be used as a shoveling-board. Fig. 2 is a similar view of a portion of the same, the gate being shown closed. Figs. 3, 4, 5, 6, and 7 are detail views.

In the said drawings, the reference-numeral 1 designates the sides of an ordinary wagon, and 2 the bottom thereof, forming the wagon-body. To the rear of the sides 1 are secured the metal wear-plates 3, consisting of the vertical portion 4 and the triangularly-shaped portion 5 at right angles to the portion 4. This latter portion 4 rests against the rear edges of the sides 1, while the portion 5 abuts against the outside thereof and is secured thereto by means of bolts 6 passing through aperture 7 in said portion. The lower ends of these wear-plates are also provided with inwardly-projecting lugs 8, having bolt-openings 9, by which they may be secured to the bottom of the wagon-body. The portion 5 is also provided with two outwardly-projecting studs or pins 10 and 12, one of which is slightly below and in rear of the other.

The end-gate consists of the transverse portion 13 and the metal side pieces 14, secured thereto. These side pieces consist of the upright portions 14^a and 14^b, the part 14^b being triangularly-shaped, and when the gate is closed, as seen in Fig. 2, they extend somewhat below the bottom of the wagon-bottom. They are also provided with curved ribs 15 and 16, having correspondingly-shaped depressions 17 and 18 therein, with which engage, respectively, the studs or pins 10 and 12. The depression 17 is longer than depression 18, and is open at its lower end, where it is provided with a shoulder 19. The portions 4 of the wear-plates are provided with outwardly-projecting hooks 20, which pass through apertures in the end-gate and the side pieces thereof, and are adapted to be engaged by the pivoted eccentrics 21, by which the gate may be locked in position when closed. The wagon-body may also be provided with a supplemental body, if desired, consisting of the side pieces 22 and 23.

The operation is as follows: When it is desired to open the gate and use the same as a shoveling-board, the eccentrics 21 are disengaged from the hooks 20, when the gate will fall down and assume the position shown in Fig. 1, the pins 10 engaging with the shoulder 19 of depression 17, (see Fig. 3,) while the other pins 12 will occupy the position in depression 18 shown in dotted lines in said figure. The gate will thus be held in a horizontal position.

When it is desired to have the gate assume a vertical position, it is given a slight upward and backward movement, which will disengage the pin from shoulder 19 and allow it to be completely withdrawn from the depression 17. The gate will now fall down and be supported by the pins in the depressions 18.

Having thus described my invention, what I claim is—

1. The combination, with a wagon-body and end-gate, of the wear-plates secured to the sides of the body, having the outwardly-projecting pins, one of which is above and in front of the other, and the plates secured to

the gate, having curved depressions with which said pins engage, one of said depressions being open at its lower end and provided with a shoulder, substantially as described.

2. The combination, with the plates 3, composed of the upright portions 4 and 5, the pins 10 and 12, and the inwardly-projecting lugs 8, of the side plates or pieces 14, consisting of the upright portions 14^a and 14^b, the portion 14^b having curved depressions with which said pins 10 and 12 engage, substantially as described.

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

TARGE G. MANDT.

Witnesses:

THOMAS H. ROBINSON,

D. HITCHCOCK.