(No Model.) 2 Sheets—Sheet 1.

# A. P. STEPHENSON.

## DUMPING BODY FOR VEHICLES.

No. 539,093. Patented May 14, 1895.

Fig. 1.

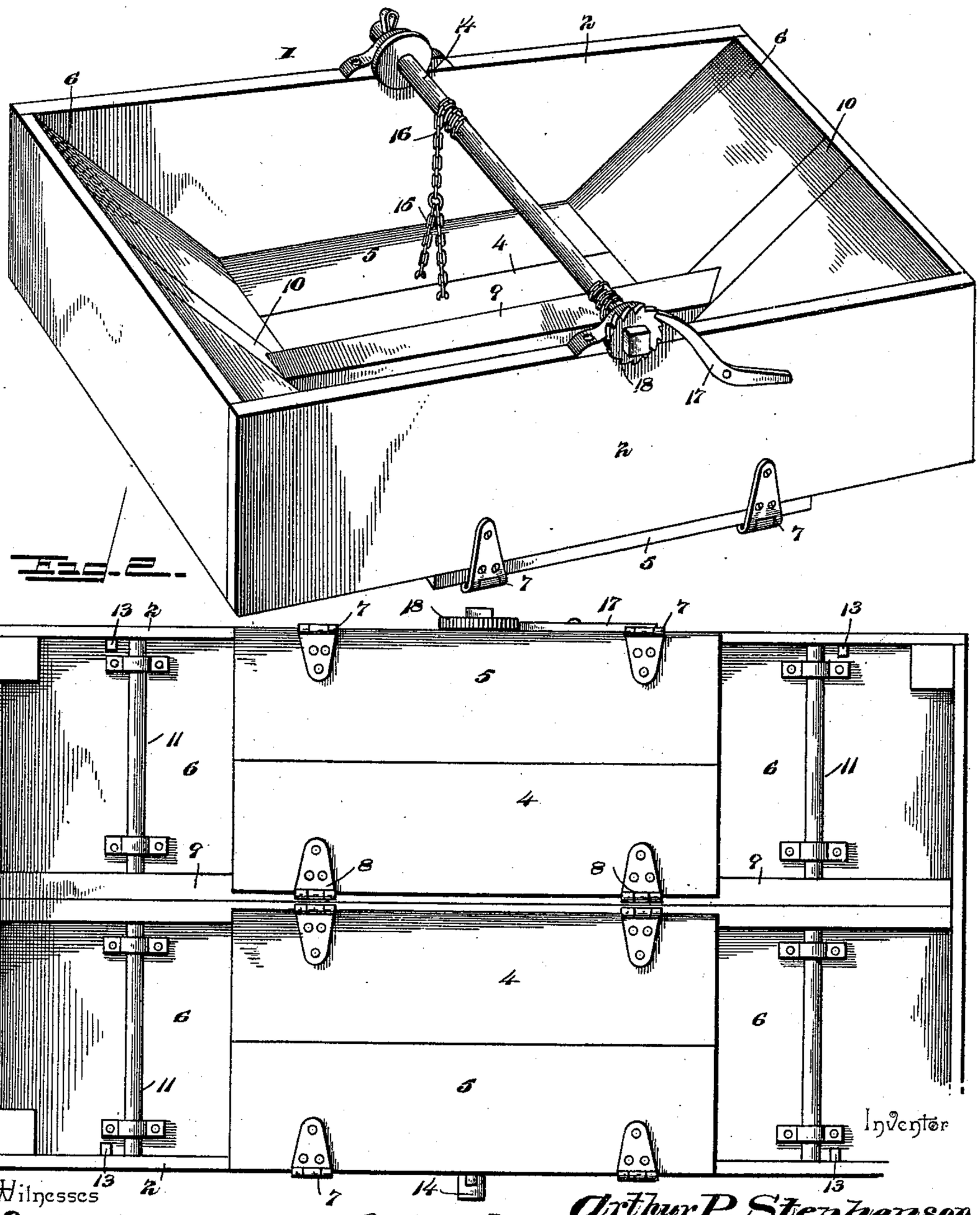


Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

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## DUMPING BODY FOR VEHICLES.

No. 539,093. Patented May 14, 1895.

Fig. 3.

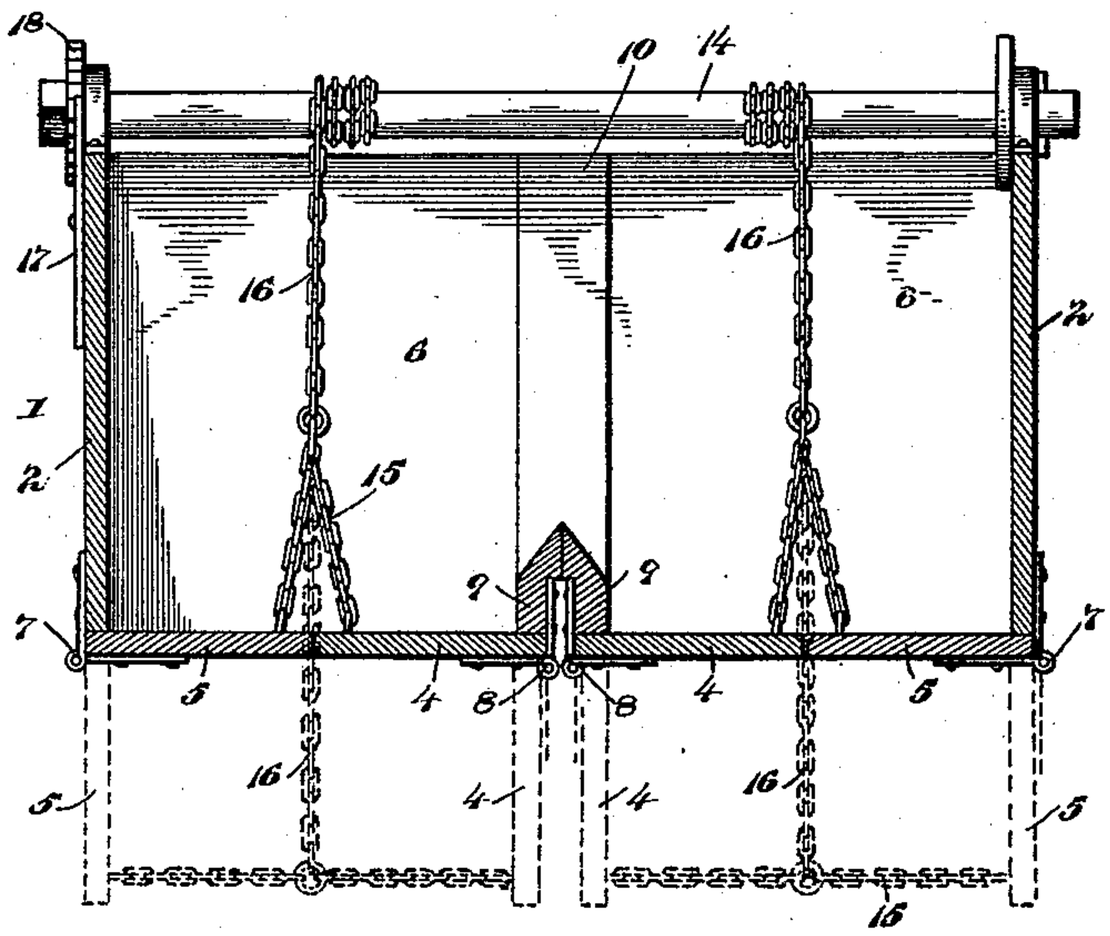
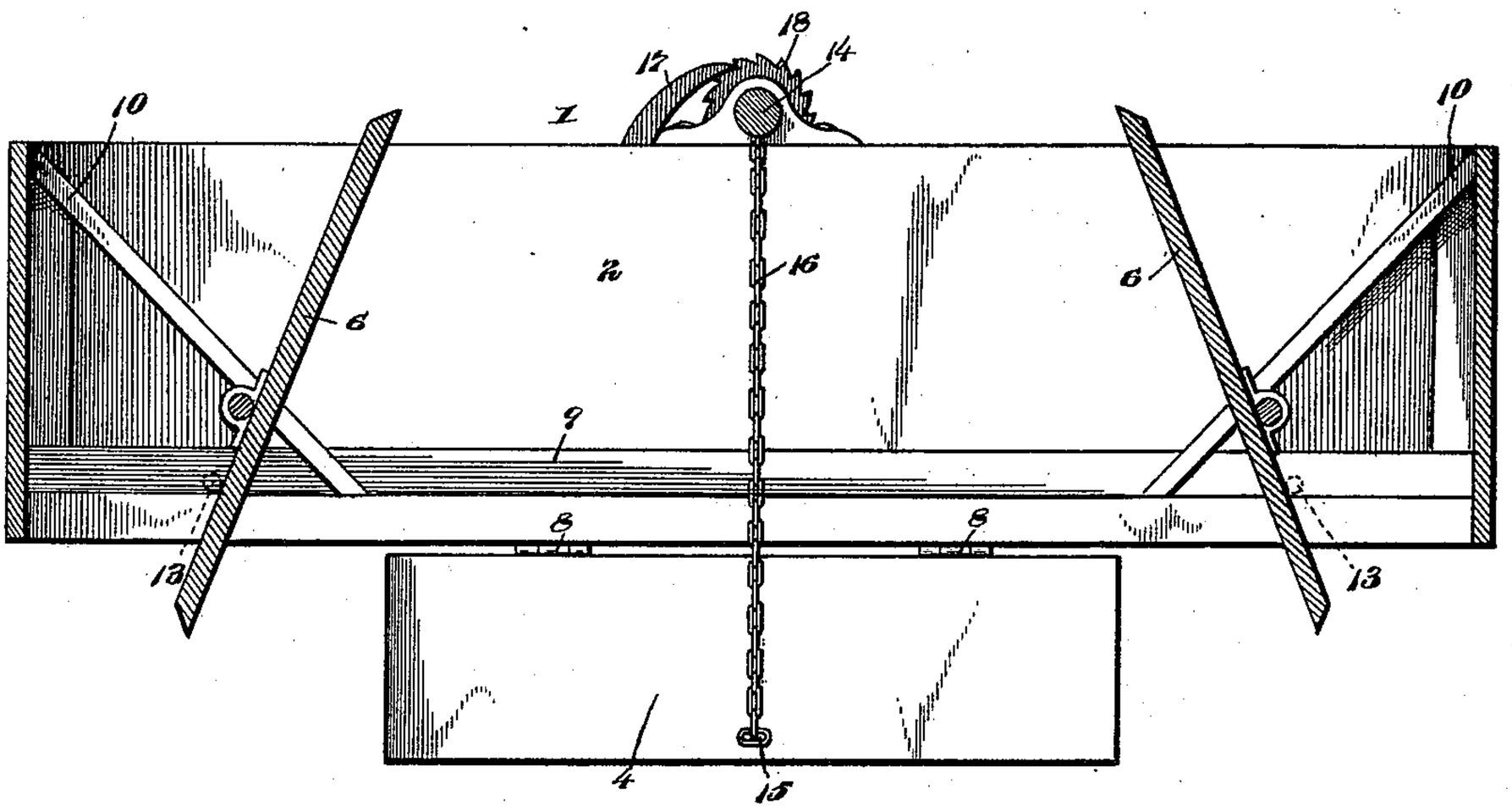



Fig. 4.

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H. J. Riley

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Church & Co.

# UNITED STATES PATENT OFFICE.

ARTHUR P. STEPHENSON, OF LEBANON, INDIANA, ASSIGNOR OF ONE-HALF TO JAMES S. WOOD, OF SAME PLACE.

## DUMPING-BODY FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 539,093, dated May 14, 1895.

Application filed March 23, 1895. Serial No. 542,972. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR P. STEPHENSON, a citizen of the United States, residing at Lebanon, in the county of Boone and State of Indiana, have invented a new and useful Dumping-Body for Vehicles, of which the following is a specification.

The object of the present invention is to improve the construction of dumping bodies for vehicles, and to provide a simple and efficient one adapted to be mounted on the ordinary construction of running gear, and capable in dumping, of protecting the reach and the axles from contact with materials, to prevent any liability of the running gear being injured in carrying heavy substances, also to avoid grain and like material from contacting with the running gear.

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 claims hereto appended.

In the drawings, Figure 1 is a perspective view of a dumping-body for vehicles constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same. Fig. 3 is a transverse sectional view, the bottom boards being shown closed in full lines and open in dotted lines. Fig. 4 is a longitudinal sectional view, the bottom boards being open.

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

1 designates a dumping body, which is adapted to be applied to all kinds of vehicles, and which is composed of sides 2, and ends 3, and provided with hinged bottom boards 4 and 5, and having pivoted or hinged inclined end boards 6.

The bottom boards 4 and 5, are arranged in pairs. The outer ones 5, are hinged to the lower edges of the sides 2, of the body at 7, and the inner ones are attached by hinges 8, to central longitudinally disposed horizontal bars 9, forming a brace for the wagon body. The upper edges of the horizontal bars 9 are oppositely beveled to direct the material to either side of it.

The body is supported at its ends by inclined braces 10, having their lower ends notched or recessed and straddling the horizontal bars 9, and the upper terminals of the inclined braces are secured to the inner faces of the ends 3 of the body adjacent to the upper edges thereof. The inclined end boards are located between the braces and the sides 2 of the body, and are hinged by transverse pintles 11, extending from one side of the body to the other, and located below the centers of the end boards 6. The end boards are supported in an inclined position by the bottom boards 4 and 5, and have their lower ends normally resting upon the terminals of the bottom boards, and as soon as the latter are released, the weight of the contents of the body swings the bottom boards downward and frees the lower ends of the end boards and causes the same to tilt, the upper portions of the end boards 6 swinging inward, and the lower portions outward. This action is automatic and the tilting of the end boards 6, is limited by stops 13, arranged on the inner faces of the side boards 2, adjacent to the lower edges thereof and disposed in rear of the lower ends of the tilting end boards.

When the end boards tilt in dumping, they form shields for the front and rear axles, and the inner pair of bottom boards 4 swing downward at the sides of the reach of the running gear, and prevent the material coming in contact with the same.

The bottom boards are maintained in a normal position, horizontally, by a shaft 14, journaled in suitable bearings of the upper edges of the sides of the body and connected by chains 15 and 16 with the bottom boards, and the shaft is held against accidental rotation by a pawl 17, pivoted to the body, and a ratchet wheel 18, mounted on the windlass shaft. The pawl is pivoted intermediate of its ends and operates as a lever and requires but a small amount of force to throw it out of engagement. The chains 15, have their upper ends attached to the windlass shaft and the chains 14, are secured intermediate of their ends to the lower terminals of the chains 15, and have their ends secured to the bottom boards. This arrangement permits the bottom boards to readily separate when swinging downward.

It will be seen that the dumping body is

exceedingly simple and inexpensive in construction, and that as soon as the chains are released by throwing the pawl out of engagement with the ratchet wheel, the dumping is automatic, and that the hinged bottom boards and tilting end boards form shields to protect the running gear and to prevent the material from coming in contact therewith. It will also be seen that the body is applicable to all kinds of vehicles and may be employed as a car body, if desired.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a dumping body, the combination with sides and ends, of tilting end boards mounted at the ends of the body and arranged at an inclination, the hinged bottom boards normally arranged horizontally and supporting the lower ends of the tilting end boards and maintaining the same in an inclined position, and means for supporting the bottom boards in a horizontal position, substantially as described.

2. In a dumping body, the combination with sides and ends, of a horizontal bar extending longitudinally of the body and arranged at the lower edges of the ends, inclined braces extending from the horizontal bar to the upper edges of the ends, the tilting end boards arranged in pairs at the ends of the body and located at opposite sides of the braces, the swinging bottom boards arranged in pairs and hinged to the sides and to the horizontal bar and supporting the lower ends of the tilting end boards and maintaining the same in a horizontal position, and means for supporting the bottom boards in a horizontal position, substantially as described.

3. In a dumping body, the combination with sides and ends, of the tilting end boards arranged in pairs, the hinged bottom boards arranged in pairs and supporting the lower ends of the tilting end boards, stops mounted on the body and arranged in rear of the lower ends of the tilting boards and limiting the movement thereof, a windlass shaft disposed transversely of the body, and chains connected with the bottom boards and the shaft, substantially as described.

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

ARTHUR P. STEPHENSON.

Witnesses:

DANIEL B. BANTER,

REED HOLLOMAN.