

(No Model.)

2 Sheets—Sheet 1.

J. E. BERING.
SCOOP BOARD FOR WAGON BEDS.

No. 558,472.

Patented Apr. 21, 1896.

Fig. 1.

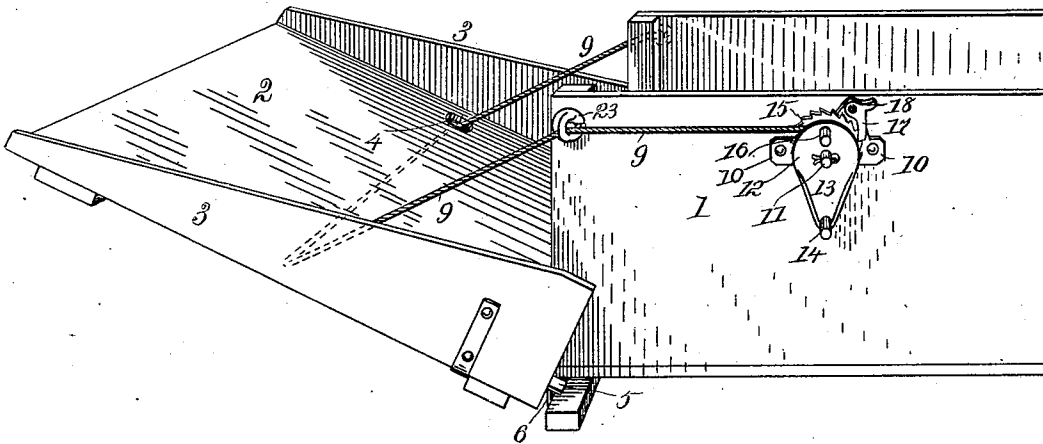
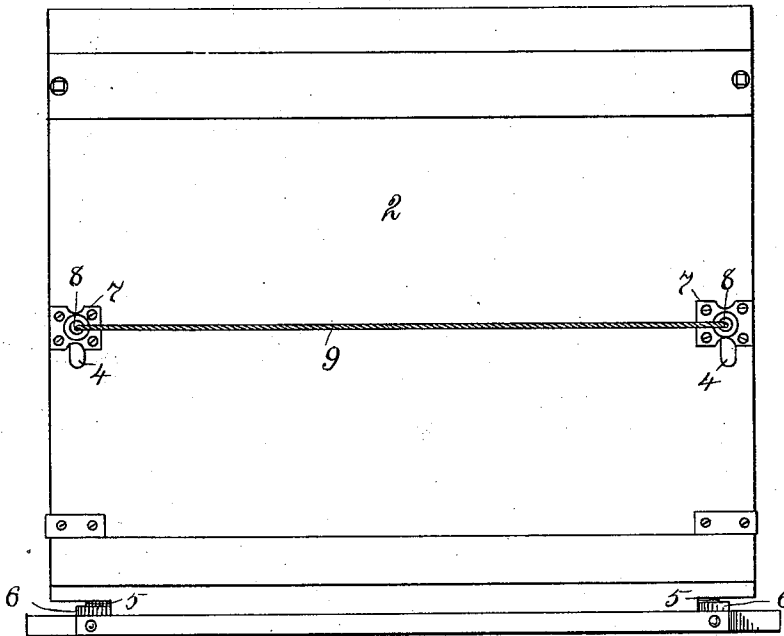


Fig. 2.



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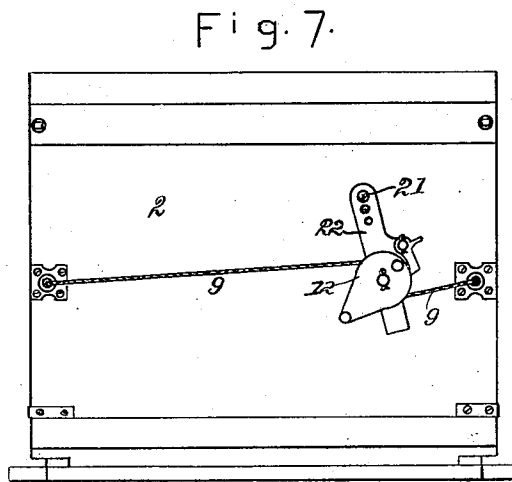
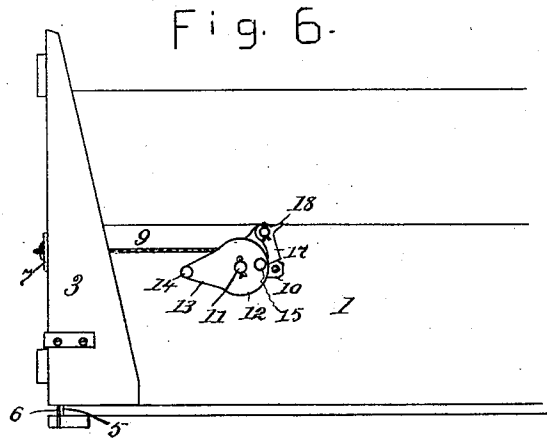
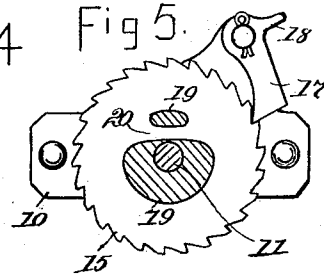
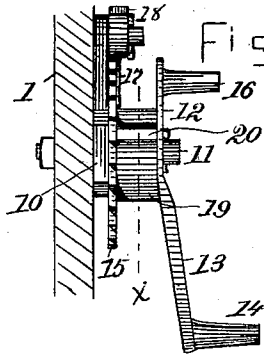
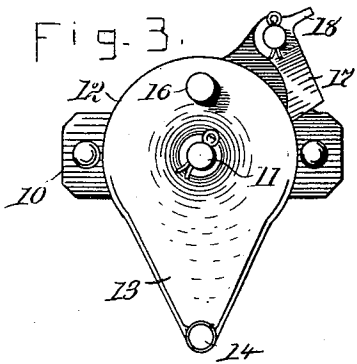
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UNITED STATES PATENT OFFICE.

JAMES EDWARD BERING, OF DECATUR, ILLINOIS.

SCOOP-BOARD FOR WAGON-BEDS.

SPECIFICATION forming part of Letters Patent No. 558,472, dated April 21, 1896.

Application filed December 16, 1895. Serial No. 572,284. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD BERING, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Scoop-Boards for Wagon-Beds, of which the following is a specification.

This invention is designed to provide superior means for holding scoop-boards tightly closed against ends of wagon-beds, for sustaining them at the proper inclination for scooping, and for supplying freedom of motion to permit the boards to be raised bodily to any desired extent. It is embodied in the particular structure hereinafter described, and it is defined in the appended claims.

In the drawings forming part of this specification, Figure 1 is a perspective representation of an end of a wagon-bed, the side-boards omitted, and a scoop-board connected therewith in a manner conforming to the general principle of my invention. Fig. 2 is a rear elevation of a scoop-board constructed and equipped in the manner I prefer. Fig. 3 is a side elevation of specific mechanism used for winding. Fig. 4 is an edge elevation of the mechanism shown in Fig. 3. Fig. 5 is a section on line *x* in Fig. 4. Fig. 6 is a side elevation of the rear end of a bed, showing the scoop-board closed against such end. Fig. 7 is a rear elevation of the scoop-board, showing a modification of arrangement and suggesting possibilities in that direction.

The wagon-bed 1 is of the ordinary or any preferred construction, so far as the more essential features of my invention are concerned; but to meet a specific requirement it is supplied with upward-extending plates, as 6, suitably secured to the tail cross-bar at the sides of the bed, and preferably made of metal. The scoop-board 2 is somewhat wider than the bed—say three inches. It has the side wings 3, it is slotted at 4, and it has lock-plates 5 at its lower end, overlying the plates 6 of the bed and engaging the same when the scoop-board is in a vertical position. Plates 7 are fastened to the rear surface of the scoop-board, and such plates have holes 8 that coincide with the slots of the board. At the upper rear corners of the bed proper and on the outer surfaces thereof are fastened eyes or staples, as 23.

A rope or equivalent, as 9, forms one of the essential elements of the mechanism used to support, raise, lower, and secure the swinging end of the scoop-board, and such rope extends from one staple 23 through a slot 4 across the board and back through the opposite slot to the opposite staple, as indicated in Fig. 1.

Other essential elements comprise a drum, on which the rope may be wound, a ratchet-wheel and detent for holding the drum, and a crank or equivalent for turning the drum. These elements are preferably secured to a side of the bed, as shown in Fig. 1, and they may be advantageously constructed as follows:

A plate 10, adapted to be secured to the bed, is cast with a projecting pin 11, which forms a journal-bearing for the drum. The cylindrical part of the drum 19 is slotted at 20, tangential to the pivot-stud. The ratchet-wheel 15 forms one of its flanges and plate 12 the other. The plate has a crank extension 13, from the end of which handle-stud 14 projects, and a stud 16 preferably projects from flange-plate 12 at the point farthest from handle-stud 14. The drum, the ratchet-wheel, and the flange-plate, with its crank extension and handle-studs, are cast in one piece and are mounted on pivot-stud 11 in an obvious manner. The detent 17 is pivoted on a stud projecting from an upward extension of plate 10, and it has a lift-lug 18, by means of which it may be raised from engagement with the teeth of the ratchet-wheel.

As shown in Fig. 1, one end of rope 9 is connected with the staple on the far side of the bed and the other end extends through, and is fastened in, the slot of the drum. When it is desired to raise the board to the position shown in Fig. 6, the stud 14 may be used as a handle after the ordinary manner of a crank-handle, or both studs 14 and 16 may be grasped at once and the drum be turned by a wrenching action, or a bar may be placed between the studs and be used to increase leverage. The last-described mode of operation is unnecessary, except for boys or weak persons, or when it is desired to close the board with unusual firmness against the end of the bed, but it is one of the possibilities incident to the particular construction described.

The swinging end of the board may be lowered to any desired degree by disconnecting the detent from the ratchet-wheel and reversing the rotation of the drum, and when the desired position is reached it may be maintained securely by throwing the detent into connection with the wheel.

The catches 5 may be readily disconnected from plates 6 when the rope is loosened, and under these conditions the board may be raised while maintaining its vertical position. This movement may be utilized to throw the scoop-board on top of the bed, when desired. While the rope is held taut the staples or eyes 23 prevent the scoop-board from rising, thereby holding the catches 5 in engagement with the plates 6 and preventing the bed from dribbling its contents.

In the modified form shown in Fig. 7 the drum and adjuncts thereof are mounted on a bar 22, which is pivoted at 21 to the rear surface of the scoop-board. In this instance the rope runs through the slot of the drum, and, as in the other instance, the rotation of the drum tends to tighten or loosen the rope.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of a bed, a scoop-board having pivotal contact at its lower end with a corresponding part of the bed, and raising and lowering mechanism for the swinging end of the scoop-board, consisting essentially of a rope and winding-drum, together with necessary adjuncts of the drum, the rope being secured to both sides of the bed and engaging the scoop-board slidably, and the drum being adapted to wind up or pay out the rope, substantially as set forth.

2. The combination of a bed; a scoop-board wider than the bed and having pivotal con-

tact at its lower end with a corresponding part of the bed; a rope connected with both sides of the bed and run through openings in the scoop-board substantially coincident with the points of connection of the rope with the bed; and a drum, and necessary adjuncts, adapted to wind up or pay out the rope; substantially as set forth.

3. The combination of a bed; a scoop-board having pivotal contact at its lower end with a corresponding part of the bed; a drum and necessary adjuncts fastened on one side of the bed; and a rope connected with the drum on one side of the bed, run through an eye connected with the end of the bed on the same side with the drum, extended across the board in engagement therewith and connected with the opposite side of the bed; substantially as set forth.

4. A winding-drum for the sustaining-rope of a scoop-board, which drum is slotted to receive the rope, has one flange supplied with ratchet-teeth, and has the opposite flange extended to form a crank-arm and supplied with projections, substantially as set forth.

5. Winding mechanism for the rope of a scoop-board, comprising a plate having a stud, a drum journaled on the stud, a flange for the drum having ratchet-teeth in its periphery, an opposite flange for the drum having a crank-arm extension, projections on the flange and the crank-arm, respectively, and a detent on the plate adapted to engage the teeth of the flange, substantially as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JAMES EDWARD BERING.

Witnesses:

LOWBER BURROWS,
HENRY A. WOOD.