O. R. MANVILLE.

SHOVELING BOARD.

APPLICATION FILED JULY 3, 1916.

1,314,684. Patented Sept. 2, 1919.

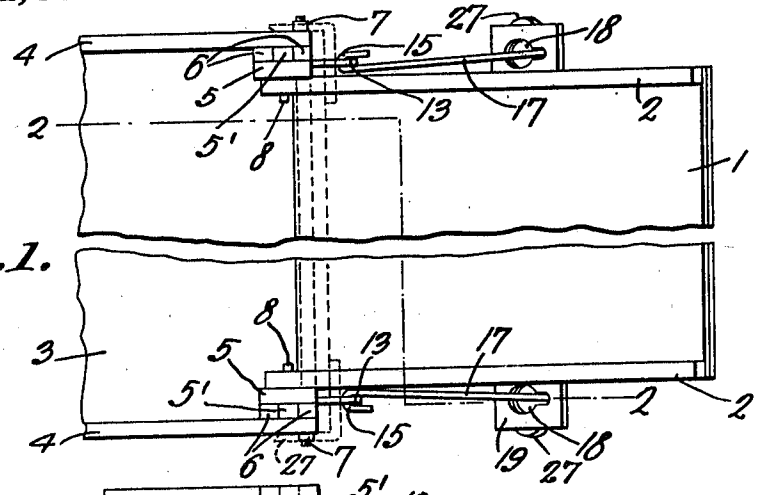


Fig. 1.

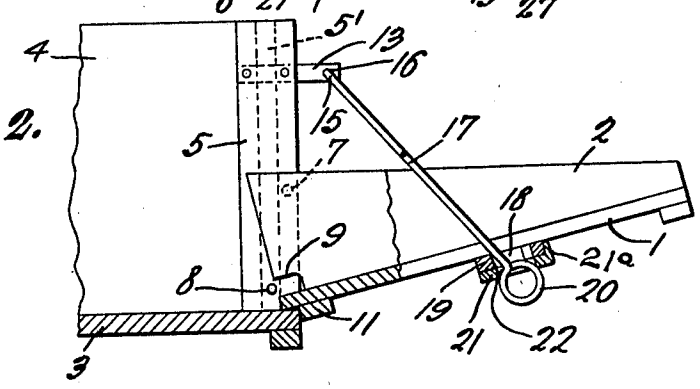


Fig. 2.

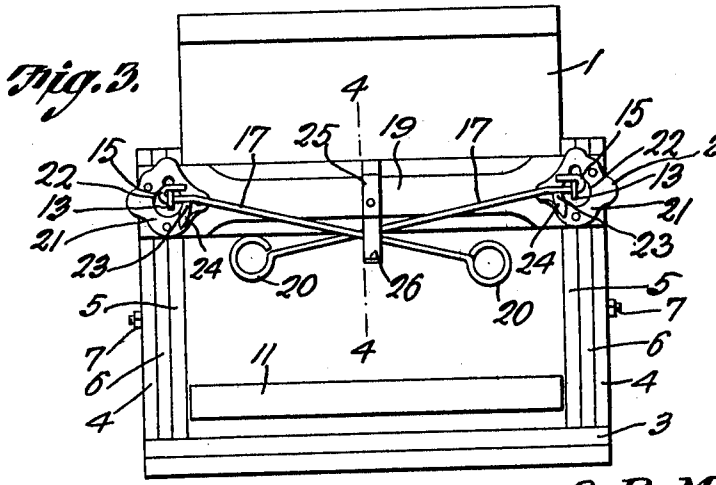


Fig. 3.

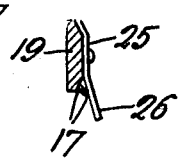


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

OSCAR R. MANVILLE, OF BRECKENRIDGE, MISSOURI.

SHOVELING-BOARD.

1,314,684. Specification of Letters Patent. Patented Sept. 2, 1919.

Application filed July 3, 1916. Serial No. 107,447.

To all whom it may concern:

Be it known that I, OSCAR R. MANVILLE, a citizen of the United States, residing at Breckenridge, in the county of Caldwell and State of Missouri, have invented a new and useful Shoveling-Board, of which the following is a specification.

The present invention appertains to shoveling boards for wagons, and is particularly an improvement over the shoveling board disclosed in my co-pending application Serial No. 92,933, filed April 22, 1916.

It is the object of the invention to provide a novel and improved means for applying a shoveling board to the rear end of a wagon body for holding the shoveling board in operative position, and for holding it in closed position so that it serves as an end gate for the wagon body, the device having means for preventing the spreading of the sides of the wagon body and embodying a novel assemblage and combination of the component elements.

A further object of the invention is the provision of a device of the character indicated which is simple and inexpensive in construction, which can be readily applied to and removed from various wagon bodies, and which will be convenient, practical and efficient in use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a plan view showing the shoveling board in operative position, portions being broken away.

Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1.

Fig. 3 is a rear view showing the shoveling board in position to serve as an end gate.

Fig. 4 is a sectional detail taken on the line 4—4 of Fig. 3.

The shoveling board 1 can be constructed of wood, metal or other suitable material, and is provided with the upstanding sides 2. The bottom of the wagon body is designated 3, and the sides 4.

The means for detachably applying the shoveling board to the wagon body, embodies a pair of upright plates 5 of wood, metal or other material, having cleats 5′ upon their outer sides and arranged vertically, said cleats 5′ being adapted to slip downwardly between the cleats 6 secured to the inner surfaces of the sides 4 adjacent the rear end of the wagon body. The plates can be bolted or otherwise fastened to the sides 3, as at 7. The lower or forward end of the shoveling board 1 is pivotally connected with the lower ends of the plates 5, and is disposed between said plates and the sides 4 of the wagon body, as clearly seen in Fig. 1. The lower or forward corners of the sides 3 of the board 1 are provided with notches 9 receiving inwardly projecting lugs 8 with which the plates 5 are provided adjacent their lower ends, whereby the shoveling board can be readily swung rearwardly and downwardly to operative position, and upwardly and forwardly to vertical position. When the board is in vertical position, the lower ends of its sides are in front of the lugs 8, whereby to prevent the rearward movement thereof, and when the board is in operative position, a transverse cleat 11 secured to the rear or lower surface thereof bears against the rear end of the bottom 3, as seen in Fig. 2, to hold the board in place.

The means for supporting the shoveling board in operative position, embodies rearwardly projecting bars 13 secured by rivets or other securing means to the outer or remote surfaces of the plates 5 between their ends, and the bars 13 project rearwardly from the plates 5 and have apertures 16 adjacent their rear ends. A pair of resilient rods 17 have hooks 15 at their forward ends engaging loosely through the apertures 16, and said rods 17 extend through apertures or openings 18 provided in the protruding end portions of a transverse cleat 19 secured to the rear or lower surface of the board 1 between the ends thereof and adjacent the free end of the board. Thus, the rods 17 are disposed at the opposite sides of the board, instead of between the sides thereof, as in the construction shown in said co-pending application. Plates or rings 21 are secured to the cleat 19 upon the rear or lower surface thereof around the apertures 18 and have apertures 22 registering with the aforesaid apertures through which the rods 17 project. The free

ends of the rods have rings or loops 20 upon which the plates 21 are seatable when the shoveling board is swung downwardly to shoveling position, whereby to facilitate the unloading or loading of the wagon. The plates 21 have flanges 21ª engaging the forward edge of the cleat 19 and serving to resist the drag from the rods 17. The rods 17 thus provide hangers for suspending the free or rear portion of the shoveling board from the plates or posts 5.

Each plate 21 is provided with a rearwardly projecting shoulder 23 below which is a cam surface 24, and a bar 25 is secured to the cleat 19 between the plates 21 and is provided with a downwardly projecting hook 26. When the board 1 is in closed position, so as to fit snugly between the plates 5, as seen in Fig. 3, the bars 13 project through the apertures 18 and 22, and the rods 17 can be swung toward the opposite sides for engagement under the hook or keeper 26. When the rods 17 are swung toward the cleat 19, they can be snapped over the shoulders 23 along the cam surfaces 24, and the free portions of the rods 17 can then be sprung under the hook or keeper 26. By this arrangement, the shoveling board is held in place by spring tension, to prevent the rattling or vibrating thereof, and the end portions of the cleat 19 bear against the rear ends of the sides 4 of the body.

The plates 21 are provided at the ends of the cleat 19 with upwardly or forwardly projecting tongues 27 which are adapted to overlap the outer surfaces of the sides 4 when the shoveling board is swung upwardly, thereby assisting in holding the parts in place, and preventing the sides 4 of the body from spreading in a thoroughly effective manner, it being noted in this connection that the shoveling board fits between the plates 5 and that the end portions of the cleat 19 rest against the rear ends of the sides 4 to limit the forward movement of the board, said ends of the cleats having the tongues 27 which overlap the outer surfaces of the sides.

Having thus described the invention, what is claimed as new is:

In a device of the class described, a wagon box comprising sides and a bottom; bars projecting rearwardly from the sides; a shoveling board; means for mounting the shoveling board for swinging movement with respect to the sides and the bottom; a transverse cleat secured to the outer face of the board and projecting beyond the lateral edges of the board; reinforcing plates secured to the outer faces of the ends of the cleat, the plate and the ends of the cleat having registering key hole slots comprising enlarged portions, and reduced portions extended toward the free end of the board, the plates having flanges engaging the forward edge of the cleat; rods pivoted to the bars and having terminal rings seated in the key hole slots of the plates and engaged in the reduced portions of the key hole slots of the plates when the board is lowered, the enlarged portions of the key hole slots receiving the bars when the board is swung to a closed position; and a clip on the intermediate portion of the board, the bars being crossed upon themselves and being engaged with the clips, when the board is in a closed position.

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

OSCAR R. MANVILLE.

Witnesses:
A. V. MAYLE,
A. B. CLEAVELAND,
B. G. FURR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."