Aug. 2, 1927. 1,637,631

T. D. BEINTEMA

END GATE SCOOP BOARD

Filed Nov. 13, 1926 2 Sheets-Sheet 1

Fig. 1.

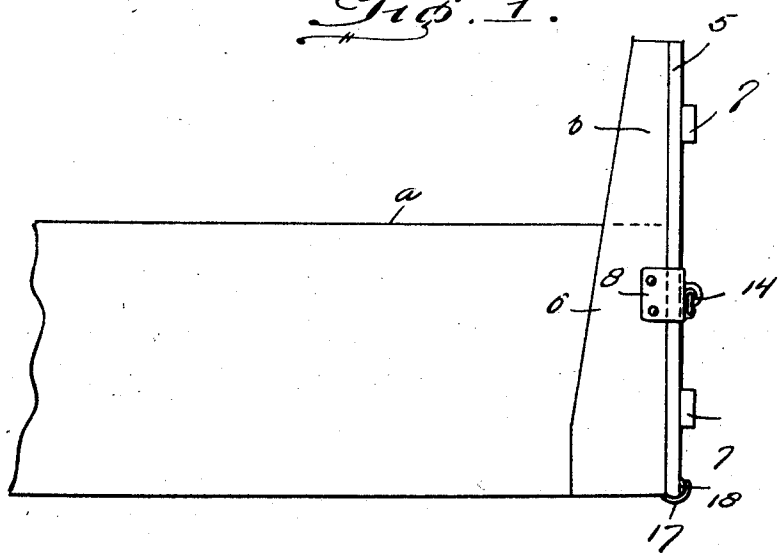


Fig. 3.

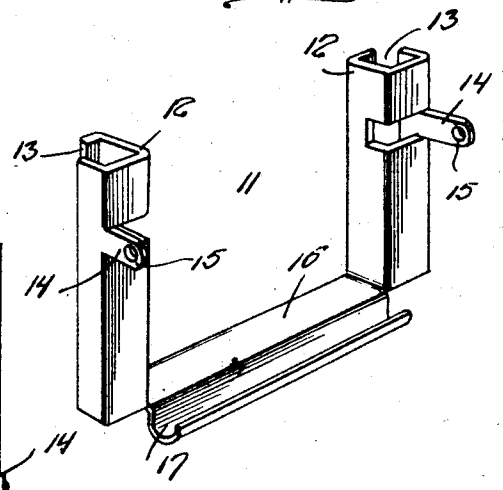
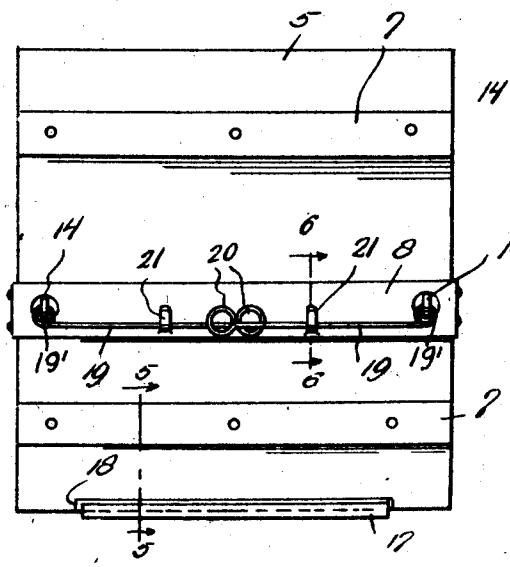


Fig. 2.



Inventor

T. D. Beintema

By Clarence A. O'Brien

Attorney

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Fig. 3.

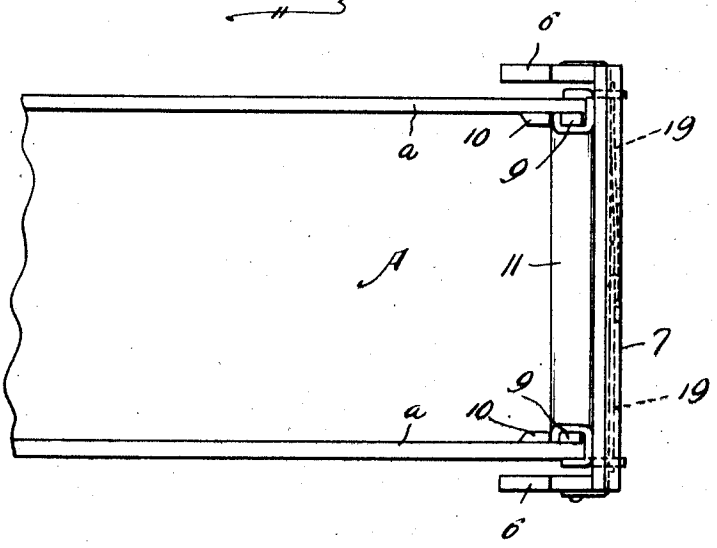


Fig. 4.

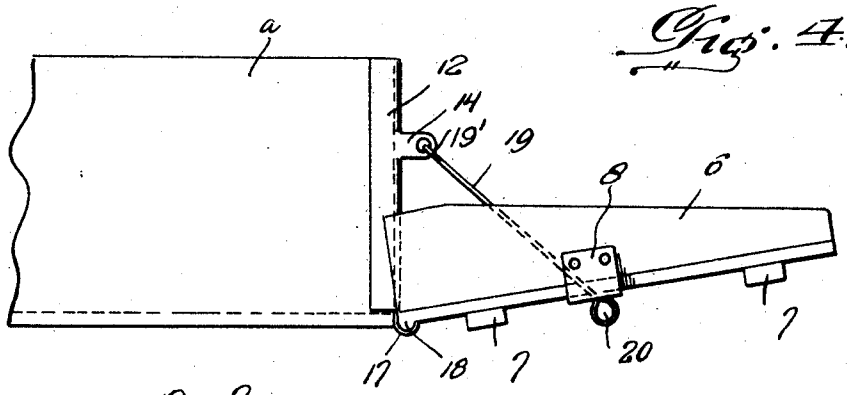


Fig. 5.

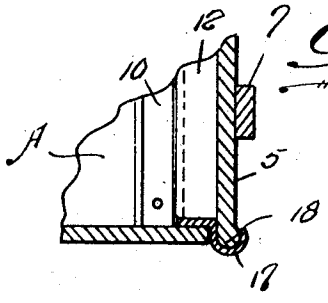
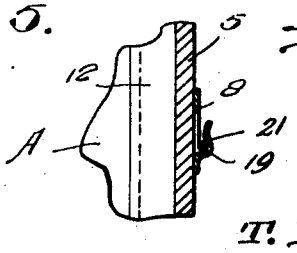


Fig. 6.



Inventor

T. D. Beintema

By Clarence A. O'Brien

Attorney

Patented Aug. 2, 1927. 1,637,631

UNITED STATES PATENT OFFICE.

TJEBBE DURK BEINTEMA, OF LEIGHTON, IOWA.

END-GATE SCOOP BOARD.

Application filed November 13, 1926. Serial No. 148,203.

The present invention relates to a combined end gate and scoop for wagons, and has for its primary object to provide highly novel and simple means for permitting the attachment of the board to the rear end of a wagon body together with means for securing the board in vertical position when used as an end gate and to support the board in inclined position when used for shoveling purposes.

A further and important object is to provide a combined end gate and scoop board of this character that may be readily associated with wagons of various structures and that may as readily be totally detached therefrom when desired.

Other objects will become apparent as the nature of the invention is better understood, the same comprising the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claimed.

In the drawings wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is a fragmentary side elevation of a wagon body equipped with my combined end gate and scoop board, the device being disclosed as associated with the body in such a manner as to provide an end gate.

Figure 2 is a rear elevation thereof.

Figure 3 is a top plan view.

Figure 4 is a view similar to Figure 1 disclosing the board as associated with the wagon body to provide a scoop board.

Figure 5 is a fragmentary detail vertical section taken substantially upon the line 5—5 of Figure 2.

Figure 6 is a similar view taken substantially upon the line 6—6 of Figure 2, and

Figure 7 is a perspective of the unit constructed for detachable association with the end of the wagon body and serving as a means whereby the board may be so attached to the wagon body as to provide an end gate or scoop board.

Now having particular reference to the drawings, the combined end gate and scoop board proper is designated by the reference character 5 which may be constructed of wood, metal or other suitable material, and which is provided at its opposite sides with the usual inwardly projecting tapering wings 6—6 that overlap the side walls *a*—*a* of the wagon body A. Upon the rear surface of the board proper are cross cleats 7—7 adjacent the upper and lower edges thereof, said cleats being preferably of wood. Between these cleats 7—7 is a cross cleat 8 of metal, the ends of which are bent laterally inwardly over the tapering side wings 6—6 and secured thereto as indicated in Figures 1, 2 and 4.

In carrying out my invention it is necessary that the side walls *a*—*a* of the wagon body A be provided at their inner sides and at their rear ends with vertical cleats or bars 9—9, at the inner edges of which are spaced cleats or bars 10—10. As a means for permitting the attachment of the combined board 5 to the wagon body there is provided a relatively U-shaped metallic unit designated in its entirety by the reference character 11 and illustrated per se in Figure 7. This unit 11 consists of a pair of tubular posts 12—12 of square shape in cross section, and slotted throughout their length at the inner corners thereof as indicated by the reference characters 13—13. Such slots are provided for permitting the posts to be slid downwardly in a vertical manner over the ends of the side walls *a*—*a* of the wagon body A as well as over the end cleats or bars 9—9. As more clearly disclosed in Figure 3 the edges of the innermost walls of said posts will engage between the cleats or bars 9—9 and 10—10 respectively for preventing any movement of the posts with respect to the wagon body other than the vertical movement required in the application or removal of the unit with respect to the wagon. The rearmost walls of the posts 12—12 are formed with laterally extending outwardly struck tongues 14—14 having openings 15—15 in the outer ends thereof, said posts being interconnected at their lower ends by a cross strip 16, the outer edge of which is formed with a depending gutter 17 for supporting the lower edge of the board proper, designated by the reference character 5. The outer surface of the board is formed or provided with a rounded cross cleat 18 that also has engagement within the gutter 17 for the purpose of preventing the accidental disengagement of the inner edge of the board from the gutter when the board is swung downwardly into the inclined position disclosed in Figure 4.

The tongues 14—14 of the hollow posts 12—12 protrude through openings in the scoop board and the metallic cleat 5 and 8,

respectively, when the board is in elevated position for serving as an end gate. Arranged within the openings 15—15 of said tongues are the inner eyed ends 19'—19' of relatively elongated rods 19—19 that also extend through the openings in the scoop board and cleat 8 and that are formed at their outer ends with eyes 20—20 that are larger than the said openings in the scoop board and cross cleat 8 for preventing said loops from passing therethrough, and against which the end board will engage when swung downwardly for maintaining the board in inclined position as in Figure 4.

At opposite sides of the center of the end board metallic cleat 8 said cleat is formed with outwardly struck vertically extending clasp fingers 21 in back of which the rods 19 are disposed after the board has been swung upwardly into end gate position, and said rods swung laterally inwardly as indicated in Figure 2. These clasp fingers will serve to secure the rods in the position shown in this figure so as to prevent any accidental downward swinging of the combined board during use of the same as an end gate.

It will thus be seen that I have provided a highly novel, simple and efficient combined end gate and scoop board for wagons that is well adapted for all the purposes heretofore designated, and even though I have herein shown and described the invention as consisting of certain detail structural elements it is nevertheless to be understood that some changes may be made therein without effecting the spirit and scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a combined end gate and scoop board for wagon bodies, a unit constructed for detachable association with the rear end of the wagon consisting of a pair of vertical hollow posts interconnected at their lower ends and being provided at their inner edges with vertical slots for receiving the edges of the wagon body side boards, said side boards being provided with vertical cleats for engagement within the posts to prevent the disengagement of the unit from the body other than in a vertical manner, a combined end gate and scoop board proper hingedly connected to the bottom portion of the unit, means for supporting the board in a vertical or inclined position with respect to the unit, said means consisting of rearwardly extending tongues formed upon the rear sides of the posts for engagement through openings in the board proper, rods pivotally connected at their outer ends to the ends of said tongues and having heads on their opposite ends for engagement with the board to support the same in an inclined position, and means whereby the rods may be secured in overlapping horizontal position upon the rear side of the board for supporting the board in a vertical end gate assuming position.

2. In a combined end gate and scoop board for wagon bodies, a unit constructed for detachable association with the rear end of the wagon, the ends of the side board of the wagon being provided with vertical cleats, said unit consisting of a pair of hollow posts rigidly interconnected at their lower ends, said posts being provided at their inner sides with vertical slots throughout the entire length thereof for receiving the edges of the wagon body side board as well as said vertical cleats, means at the interconnecting member between said vertical posts for facilitating the pivotal connection of a combined end gate and scoop board to the unit at the lower edge thereof, means for supporting the board in a vertical or inclined position with respect to the unit, said means consisting of rearwardly extending tongues formed upon the rear sides of the posts for engagement through openings in the board proper, rods pivotally connected at their outer ends to the ends of said tongues and having heads on their opposite ends for engagement with the board to support the same in an inclined position, and means whereby the rods may be secured in overlapping horizontal position upon the rear side of the board for supporting the board in a vertical end gate assuming position.

In testimony whereof I affix my signature.

TJEBBE DURK BEINTEMA.