

No. 760,499.

PATENTED MAY 24, 1904.

C. H. VAN DEUSEN.
WAGON BOX.

APPLICATION FILED AUG. 8, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

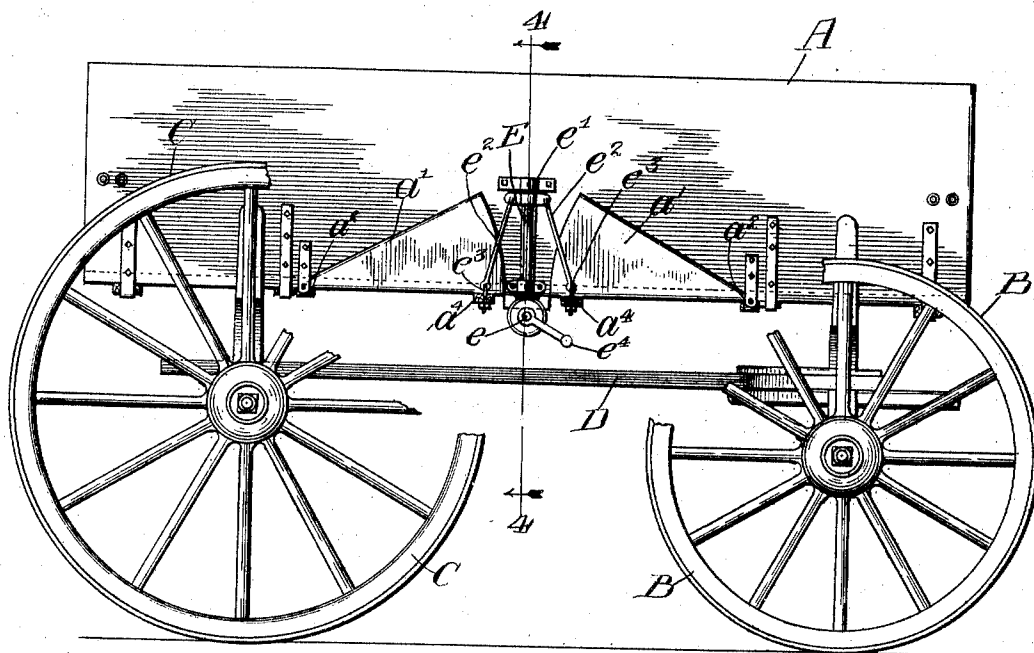
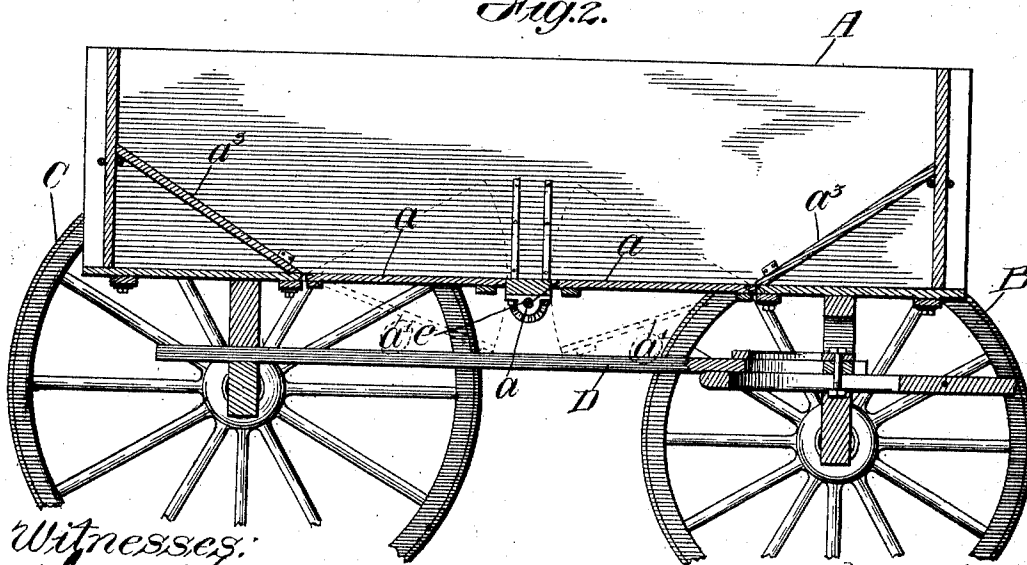


Fig. 2.



Witnesses:

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Inventor:

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att'y

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2 SHEETS—SHEET 2.

Fig. 3.

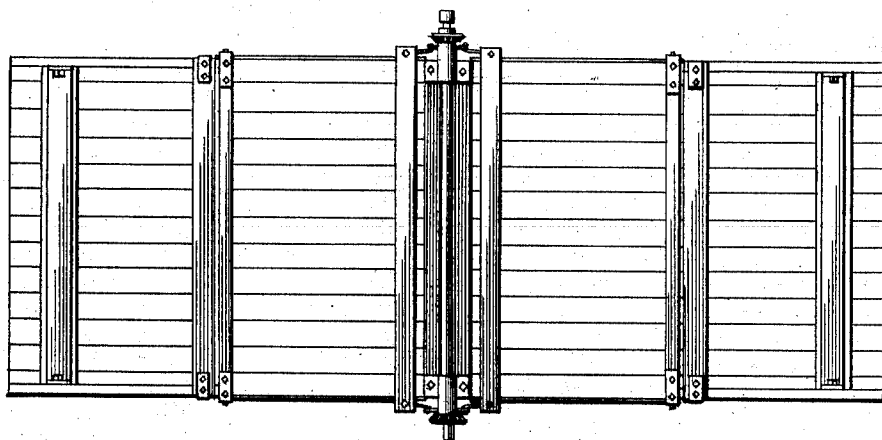


Fig. 4.

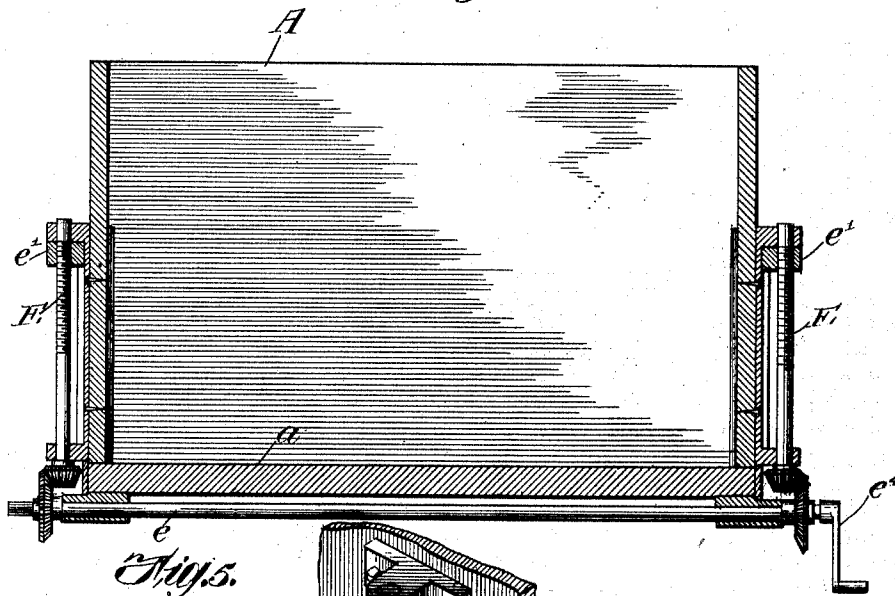
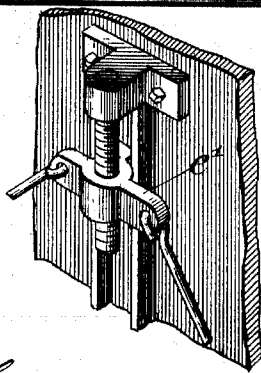


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES H. VAN DEUSEN, OF VERONA, ILLINOIS.

WAGON-BOX.

SPECIFICATION forming part of Letters Patent No. 760,499, dated May 24, 1904.

Application filed August 8, 1903. Serial No. 168,713. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. VAN DEUSEN, a citizen of the United States of America, and a resident of Verona, Grundy county, Illinois, have invented a certain new and useful Improvement in Wagon-Boxes, of which the following is a specification.

My invention relates to dumping-wagons adapted for use in various connections.

It relates more particularly to dumping-wagons which can be employed by farmers for unloading grain and which can at the same time be employed for various other purposes, such as hauling lumber, stone, coal, gravel, &c.

Generally stated, the object of my invention is to provide a simple and highly efficient construction of dumping-wagon of the foregoing character.

A special object is to provide an improved construction and arrangement whereby a free discharge of grain, and particularly ear-corn, may be had from the center of the wagon-box even though the latter be located in the usual and well-known manner only a short distance above the usual reach, which latter of course tends to limit the downward swing of any doors or swinging bottom-sections with which the wagon-box may be provided.

Another object is to provide an improved and efficient form of adjusting mechanism for raising and lowering the doors or swinging bottom-sections.

A further object is to provide an improved arrangement of false bottoms for facilitating the discharge of grain and the like from the center of the wagon-box.

Another object is to provide an improved construction and arrangement whereby the wagon-box although characterized by the aforesaid discharge or dumping devices may be employed like an ordinary farm-wagon for hauling dirt, stone, lumber, and various farm products.

To the foregoing and other useful ends my invention consists in matters hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a dumping-wagon embodying the principles of my invention, portions

of the wheels being broken away for convenience of illustration. Fig. 2 is a longitudinal section through the wagon shown in Fig. 1. Fig. 3 is a bottom plan of the wagon-box shown in Fig. 1. Fig. 4 is a cross-section on line 4 4 in Fig. 1. Fig. 5 is a perspective of a portion of the adjusting mechanism.

As thus illustrated my improved dumping-wagon comprises a box A of the usual form or pattern, front and rear vehicles B and C, the said wheels being connected by the usual reach D. The said box is provided at its center with a relatively narrow bottom-section *a* and at each side thereof with swinging bottom-sections *a'*. The said swinging bottom-sections are preferably of sheet metal and are so shaped or formed as to have guards or side portions which prevent an improper discharge of the grain when the sections are swung downward. As illustrated, these swinging sections are provided at their ends with pivotal or hinged connections *a''*. Thus pivotally connected with the body of the wagon-box these swinging connections are adapted to be swung down into the position shown in dotted lines in Fig. 2, it being observed at this juncture that the reach D tends to limit this swinging or adjustment of the said bottom-sections. With the exception of these swinging sections and the narrow central stationary center *a* and with the further exception of the false bottoms *a'''*, which latter can be employed or not, as the user may see fit, the wagon-box A can be of any suitable known or approved construction. When the swinging sections are closed, as shown in the drawings, their distal ends are close to the bottom-section *a*, and at such time the three sections combine with the balance of the flooring of the wagon-box to provide a continuous and practically smooth bottom.

Any suitable arrangement can be employed for opening or closing these doors or swinging bottom-sections *a'*. For example, rotary adjusting-screws E can be mounted at opposite sides of the box and gear-connected with the horizontal and transversely-arranged shaft *e*. Each of said screws is provided with a vertically-adjustable member or traveling nut *e'*. These traveling nuts are connected by

links or rods e^2 with the cross-pieces a^4 on the swinging bottom-sections. Preferably the links or rods e^2 are connected with eyebolts e^3 , extending through the ends of said cross-piece a^4 . With this arrangement the connections between the swinging bottom-sections and the adjusting devices can be tightened, so as to insure a tight closing of the swinging bottom-sections against the under side of the wagon-box. The shaft e is provided at each end with a squared or polygonal end portion adapted to receive a key or crank e^4 . This crank can be employed for rotating said shaft, and when this is done the nuts e' will rise or fall, according to the direction in which the adjusting-screws are rotated. Thus in addition to serving as a means for opening and closing the swinging bottom-sections the said screws have the further function of cooperating with the nuts in locking the swinging sections in any desired position.

Although the reach D, as stated, tends to limit the downward swing of the swinging bottom-sections, it will be seen that an opening of sufficient width is created by the downward swing of these sections. This is due to the provision of the stationary and relatively narrow bottom-section a , which insures the formation of a considerable gap between the free or distal ends of the swinging sections when the latter are swung into their lowered positions. Thus although the swinging sections may have but a slight downward swing such adjustment on their part will always insure an opening of sufficient size to permit the ready and free discharge of all kinds of grain and even of ear-corn. When these swinging sections are closed and in their normal positions, the wagon is then in condition to be employed in the usual manner and for any ordinary purpose, the false bottom a^3 being, as previously stated, removable and the two swinging sections combining with the interposed and relatively narrow stationary bottom-sections to provide a continuous and practically-smooth floor or bottom for the wagon-box. In this way my improved wagon is capable of efficient service in discharging grain without shoveling, and at the same time it is capable of being used for various ordinary purposes. It will be seen that grain thus discharged from the wagon-box can be received by an elevator or other conveying device and can then be handled or disposed of in any suitable manner.

It will also be readily understood that I do not limit myself to any particular construction and that various features of my improved dumping-wagon can be changed or modified without departing from the spirit of my invention.

I claim as my invention—

1. A dumping-wagon having a box constructed with downwardly-swinging bottom-sections, the axes of said sections being at

right angles to the length of the box, and having also an intermediate transversely-arranged stationary bottom-section.

2. A dumping-wagon having a box constructed with two swinging bottom-sections, said sections being hinged at their outer ends, and having also a stationary bottom-section arranged between the free or distal inner ends of said swinging sections.

3. A dumping-wagon having a box constructed with swinging bottom-sections, the axes of said sections being at right angles to the length of the box, and having also a relatively narrow bottom-section arranged between the free or distal inner ends of said swinging sections.

4. A dumping-wagon having a box constructed with swinging bottom-sections adapted to swing down and provide central discharge-openings, a cross-piece between the free or distal ends of said sections, and a combined locking and adjusting mechanism for raising and lowering said sections and locking the same in any desired position.

5. A dumping-wagon having a box constructed with swinging bottom-sections, the axes of said sections being at right angles to the length of the box, each swinging section being provided with upwardly-extending side portions or guards, adapted to embrace the sides of the box, and suitable adjusting mechanism for raising and lowering said swinging sections.

6. A dumping-wagon having a box constructed with swinging sections, each section being hinge-connected with the box at its outer end, the axes of said sections being at right angles to the length of the box, and a pair of inclined false bottoms adapted to provide an upward continuation of the sloping surfaces provided by the said sections, when the sections are adjusted to their lowered positions.

7. A dumping-wagon having a box provided with centrally-arranged downwardly-swinging bottom-sections, the axes of said sections being at right angles to the length of the box, vertically-arranged screws mounted at the sides of the box, nuts on said screws connections between said nuts and swinging sections, and means for rotating said screws and thereby raising and lowering said bottom-sections.

8. A dumping-receptacle having its bottom provided with swinging sections, the sections being hinged at their outer ends, and also with an intermediate stationary section, said stationary section being relatively narrow and interposed between the free or distal inner ends of the said swinging sections.

Signed by me at Verona, Grundy county, Illinois, this 31st day of July, 1903.

CHARLES H. VAN DEUSEN.

Witnesses:

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W. M. WOODWARD.