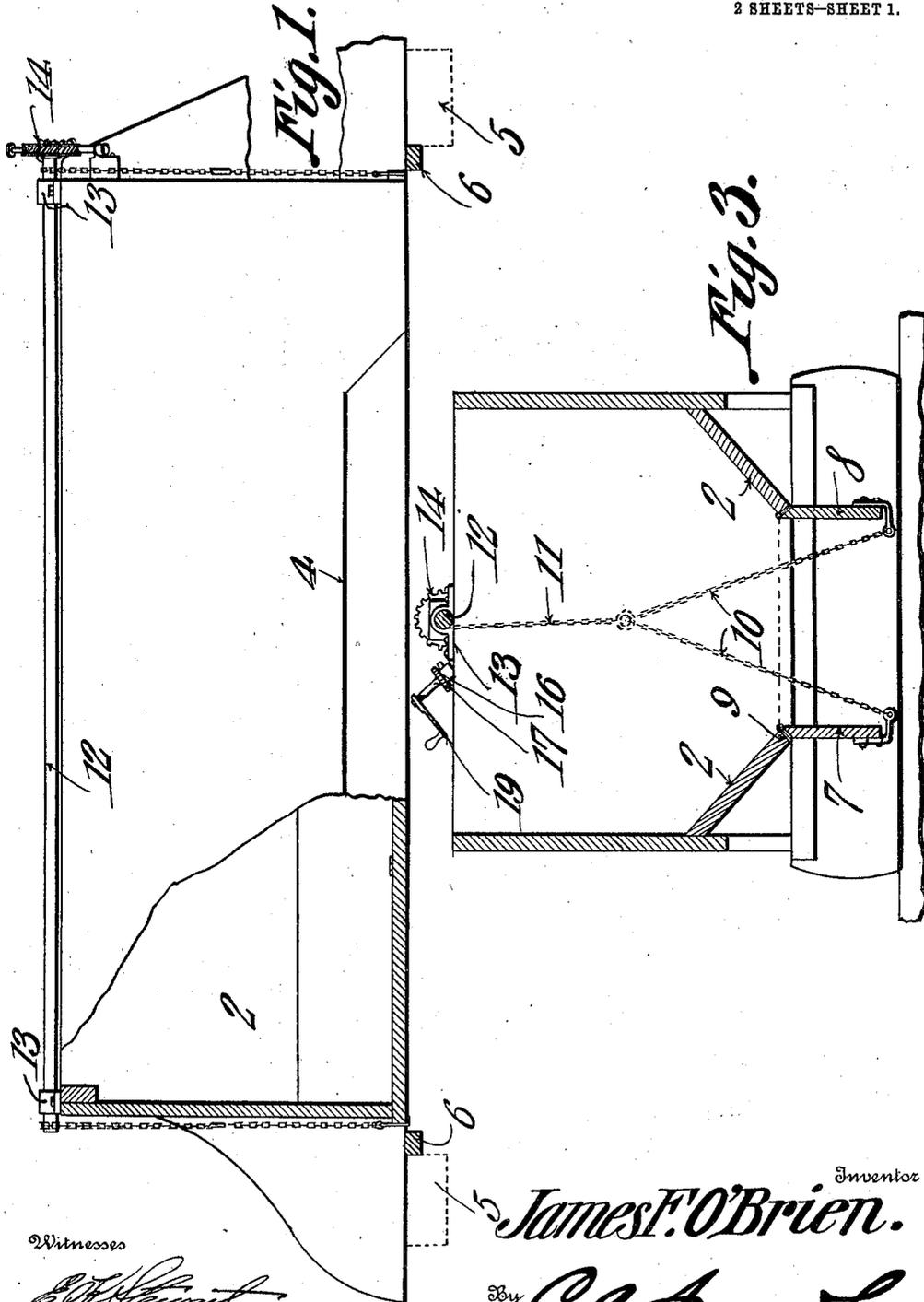


J. F. O'BRIEN, DEC'D.
 W. B. VESTAL, ADMINISTRATOR.
 WAGON BOX.
 APPLICATION FILED FEB. 17, 1910.

1,002,174.

Patented Aug. 29, 1911.

2 SHEETS—SHEET 1.



Witnesses
E. J. Stewart
Hubert Lawson

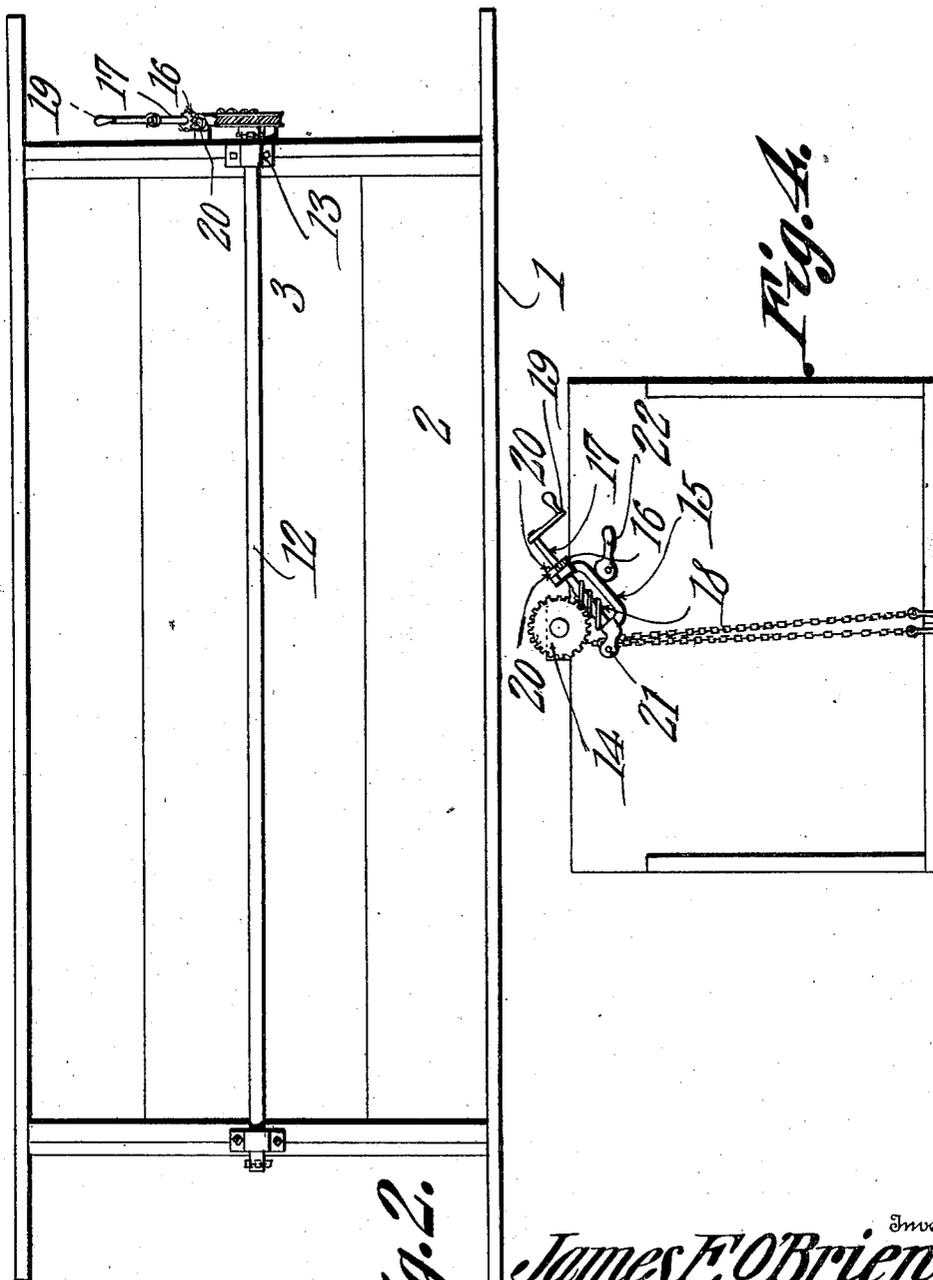
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 Attorneys

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Witnesses

E. J. Hunt
Herbert Lawson

Fig. 2.

James F. O'Brien. ^{Inventor}

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UNITED STATES PATENT OFFICE.

JAMES F. O'BRIEN, OF CLOVERDALE, INDIANA; WILLIAM B. VESTAL, ADMINISTRATOR OF SAID JAMES F. O'BRIEN, DECEASED, ASSIGNOR OF ONE-HALF TO EMMET F. O'BRIEN AND ONE-HALF TO FRED FULTZ, BOTH OF CLOVERDALE, INDIANA.

WAGON-BOX.

1,002,174.

Specification of Letters Patent. Patented Aug. 29, 1911.

Application filed February 17, 1910. Serial No. 544,448.

To all whom it may concern:

Be it known that I, JAMES F. O'BRIEN, a citizen of the United States, residing at Cloverdale, in the county of Putnam and State of Indiana, have invented a new and useful Wagon-Box, of which the following is a specification.

This invention relates to wagon boxes and its object is to provide a device of this character designed to be used in connection with the running gear of different makes of wagons, said box being formed with movable bottom sections designed to swing downwardly for the purpose of dumping the contents of the box.

Another object of the invention is to provide a device of this character having novel means carried solely by the box and for the purpose of elevating the movable bottom sections and supporting them in closed position.

A still further object is to provide improved means for locking the bottom sections in elevated positions, said means being shiftable for the purpose of permitting the said bottom sections to drop promptly to their open position when it is desired to dump the contents of the box.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings: Figure 1 is a view partly in side elevation and partly in section of a wagon box constructed in accordance with the present invention. Fig. 2 is a top plan thereof. Fig. 3 is a vertical transverse section through the wagon box and showing the bottom sections open. Fig. 4 is an end elevation of said box.

Referring to the figures by characters of reference 1 designates the body of the box, the same being provided along the side walls thereof with inclined bottom portions 2 which converge downwardly and form an outlet opening 3 in the bottom of the box. The side walls of the box extend outside of these inclined portions 2 and are cut away as indicated at 4 so as to permit the front wheels of the vehicle on which the box is

placed to swing under the side portions of the box and thus make short turns. The side walls of said box are also designed to rest on the bolsters 5 of the vehicle and cross cleats 6 are secured to said walls and are designed to extend between and against the bolsters so as to prevent the box from shifting longitudinally upon said bolsters.

Opposed bottom sections 7 and 8 are hingedly connected to the lower edges of the side portions 2 and those edges of said sections to which the hinges are attached are preferably beveled as shown at 9 so as to permit the bottom sections to swing downwardly into vertical positions as shown in Fig. 3. The two sections 7 and 8 extend throughout the length of the bottom and a chain 10 is secured to each end of each of the sections 7 and 8 the two chains at one end of the box converging upwardly and being attached to a single elevating chain 11 while the two chains adjacent the other end of the box are similarly connected to another elevating chain 11. Both of the elevating chains are secured to a winding shaft 12, the end portions of which are journaled within the brackets 13 secured upon the middle portions of the upper edges of the end walls of the box and a worm gear 14 is secured to the front end of the shaft.

A yoke 15 is mounted upon the front end of the box 1, there being a worm shaft 17 journaled within this yoke and provided with a worm 18 designed to engage the gear 14. A crank 19 or the like may be attached to one end of the shaft 17 to facilitate manual rotation thereof, and a ratchet wheel 16 may be secured to the shaft. This wheel is normally engaged by a pawl 20 which holds the worm and gear against rotation.

When it is desired to use the box herein described the same is placed upon bolsters on the wagon axles, the cleats 6 serving to prevent the box from shifting longitudinally upon the bolsters. The bottom sections 7 and 8 will of course be disposed between the bolsters. To close and secure the bottom sections it is necessary to rotate the shaft 17 and gear 14 and shaft 12 will be revolved and the chains 11 will therefore be wound on shaft 12 and the sections 7 and 8 elevated to their closed positions.

Should it be desired to dump the contents of the wagon box it becomes merely neces-

sary to lift the pawl 20 out of engagement with the ratchet wheel on shaft 17. Shaft 12 will therefore swiftly unwind the chains and permit the sections 7 and 8 to drop to their hanging positions. Should it be desired to slowly lower the bottom sections, the gear 14 can be gradually rotated by means of the worm. This last manner of dumping the contents is especially desirable where the contents of the box are to be spread over a considerable area. By slowly opening the bottom of the box and moving the wagon forward the contents will be distributed in this manner. If desired, the yoke 15 can be pivotally mounted, as at 21 to permit the worm to swing out of engagement with the gear to effect a very sudden dumping. In such a structure a cam lock 22 is preferably used.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claim.

What is claimed is:—

The combination with a wagon box hav-

ing bottom sections hingedly connected to the side portions thereof, a shaft journaled upon the end portions of the box, and flexible connections between the shaft and sections, said connections being adapted to be wound on the shaft, of a gear secured to the shaft, a yoke pivotally mounted at one end upon one end of the wagon box, a shaft journaled within and extending above the yoke, means on the shaft for rotating the same, a worm revoluble with the shaft, a cam mounted for rotation upon one end of the wagon box and constituting means for supporting the yoke with the worm out of mesh with the gear, and means for rotating the cam to shift the yoke and to move the worm into mesh with the gear, said cam constituting means for holding the worm in mesh.

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

JAMES F. O'BRIEN.

Witnesses:

C. A. ROCKWELL,
G. B. ROCKWELL.