

J. E. BRIGGS.
DUMPING CART.
APPLICATION FILED AUG. 26, 1910.

1,060,313.

Patented Apr. 29, 1913.
2 SHEETS—SHEET 1.

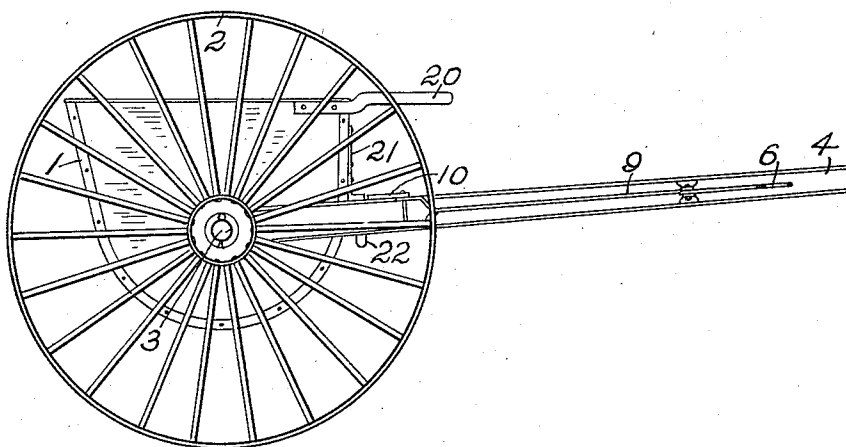


Fig. 1.

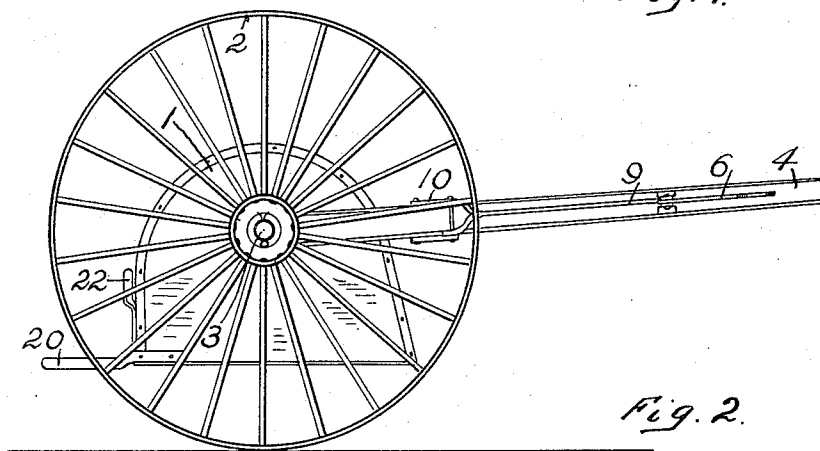


Fig. 2.

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2 SHEETS—SHEET 2.

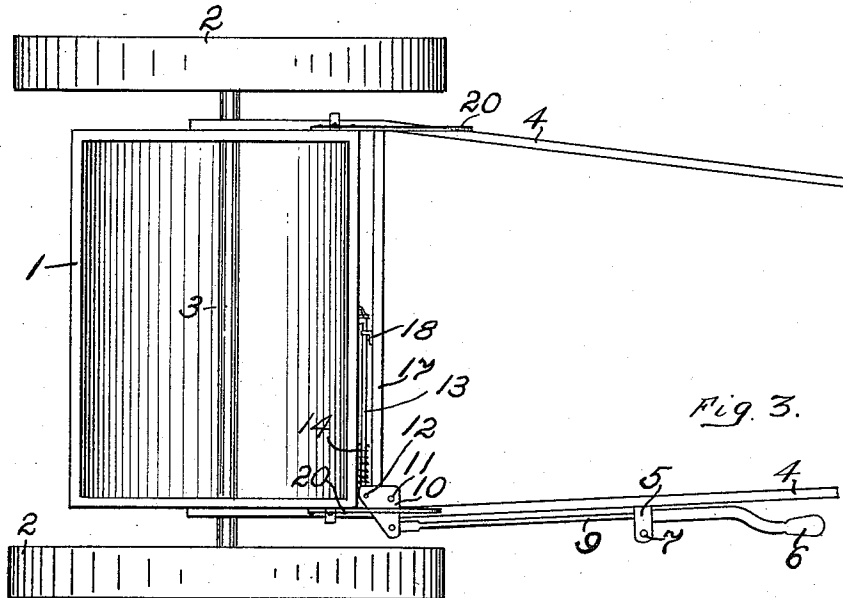


Fig. 3.

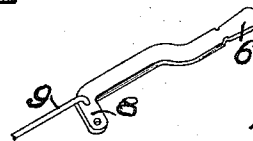


Fig. 5.

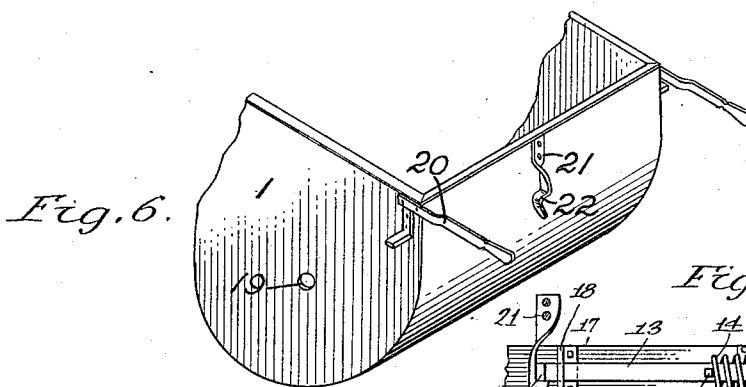


Fig. 6.

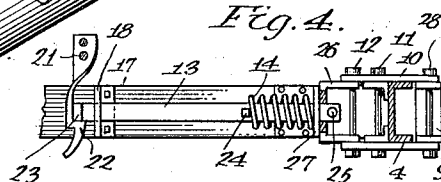


Fig. 4.

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JAMES E. BRIGGS, OF WATERLOO, IOWA.

DUMPING-CART.

1,060,313.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed August 26, 1910. Serial No. 579,033.

To all whom it may concern:

Be it known that I, JAMES E. BRIGGS, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, Iowa, have invented certain new and useful Improvements in Dumping-Carts, of which the following is a specification.

My invention relates to improvements in dumping-carts, and the object of my improvements is to provide a cart-body which will dump itself when released from its catch-bolt, and which will become reengaged with said catch-bolt after dumping, by means of the action of automatic means engaged with said catch-bolt. This object I have accomplished by the means which are hereinafter described and claimed, and which are illustrated in the accompanying drawings, in which:

Figure 1 is a right-hand side elevation of my improved dumping-cart. Fig. 2 is a side elevation of said cart, showing the cart-body swung to its dumping position. Fig. 3 is an upper plan view of said cart. Fig. 4 is a detail view of the automatic means for acting upon the catch-bolt to reengage it to its catch. Fig. 5 is a detail view of the hand-lever used to detach said catch-bolt from its catch. Fig. 6 is a detail view of part of the cart-body.

Similar characters of reference designate corresponding parts throughout the several views.

The cart-body 1 is mounted on a transverse axle 3 passed through bearing-openings 19, to swing therewith from the position shown in Fig. 1 to that shown in Fig. 2. The axle is passed through the cart sides at a location that places the center of gravity of said body both above and somewhat to the rear of the axle, whereby, when the body is released from its fastening-means, it automatically tips backward and discharges its load, becoming inverted in the process. The handles 20 on the front upper corners of the body 1 are provided as a means whereby the body may be manually swung forward again to become reengaged with its fastening-means.

Pivoted to said axle 3, and extending forwardly, are cart-shafts 4. Brackets 29 project from the sides of said body 1 and rest on top of said shafts 4, limiting movement of the body downwardly. Brackets 5 project outwardly from right-hand shaft and con-

tain a pintle 7 on which the outturned part of a hand-lever 6 is pivoted. At the angle of said lever is pivoted the forward end of a connecting-rod 9, the rear end of the latter being forked, with the fork-members pivoted on a pintle 28 to one of the angles of connected triangular plates 10, another angle of the latter being pivoted to said shaft on a pintle 11. A third angle of said plates has a pivotal connection at 12 with the outer end of a channeled body 26 having a slot in which is movable the outer end of a catch-bolt 13, the latter having a catch-lug 23 at its inner end projecting toward said body 1. A pin 24 is fixed in said bolt 13, between which and the body 26 a coiled compression-spring 14 encircles said bolt tending to move it away from the shaft 4 adjacent its outer end. A stud 25 on the side of said bolt 13 outside of the body 26 serves as a stop against the latter. The bolt 13 also works through a slot in a bracket 27 secured on the cross-bar 17. A transverse bar 17 connected between said shafts 4 carries a bracketed and slotted slideway 18 through whose slot the inner end of said catch-bolt is slidable. A catch 21 is secured to the middle forward part of said body 1, and its lower part is so formed at 22 that a socket is provided by a bend therein to receive the bolt-head 23, while the depending part of the catch below this socket is bent obliquely to the side of the body opposite said bolt-head.

In operation, the cart-body is dumped by merely shifting outwardly the hand-lever 6, which retracts, through the action of the intermediate described connections, the catch-bolt 13 sufficiently to cause its head 23 to become disengaged from the socket 22 in the catch 21, and the released body, by reason of its unbalanced condition, dumps itself to the position shown in Fig. 2. When the body is swung back to its first position, the obliquely-disposed depending end of the catch 21 engages and pushes upon the end of the catch-bolt 13, the latter having become retracted through the action of the spring 14, and then the bolt-head 23 moves into the socket 22 impelled by said spring, automatically. In other words, the spring 14 tends to keep the catch-bolt in its first position without regard to the action of the hand-lever 6, so the reengagement with the catch is effectual at all times.

Having described my invention, what I

claim as new, and desire to secure by Letters Patent, is;

In combination, a receptacle tiltably supported, and shafts connected to the supporting-means, a catch on said receptacle formed with an indentation and an obliquely-directed lower end, an angular hand-lever with short and long members and having the extremity of its short member pivotally connected to one of said shafts, a movable catch-bolt having a projection adapted to detachably engage the indentation in said catch, the obliquely-directed end of the catch being adapted to move the bolt-projection out of its path when moved past it in one direction, a bell-crank lever pivotally-connected to the same shaft, an orificed bracket in which said catch-bolt is slidably seated, a stop on the

outer end of said catch-bolt, a body slidably mounted upon the catch-bolt between the outer face of said bracket and said stop and being hinged to the inner arm of the bell-crank lever, another stop on said catch-bolt, a compression-spring mounted between and engaging both said last-mentioned stop and the inner face of said bracket, and a connecting-rod having pivotal connections with the other end of said bell-crank lever and with the angle of said hand-lever.

Signed at Waterloo, Iowa, this 8th day of Aug. 1910.

JAMES E. BRIGGS.

Witnesses:

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G. C. KENNEDY.

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