No. 842,151. PATENTED JAN. 22, 1907.

R. JOHNSON.

DUMPING MECHANISM FOR WAGONS.

APPLICATION FILED AUG. 13, 1906.

Fig. 1.

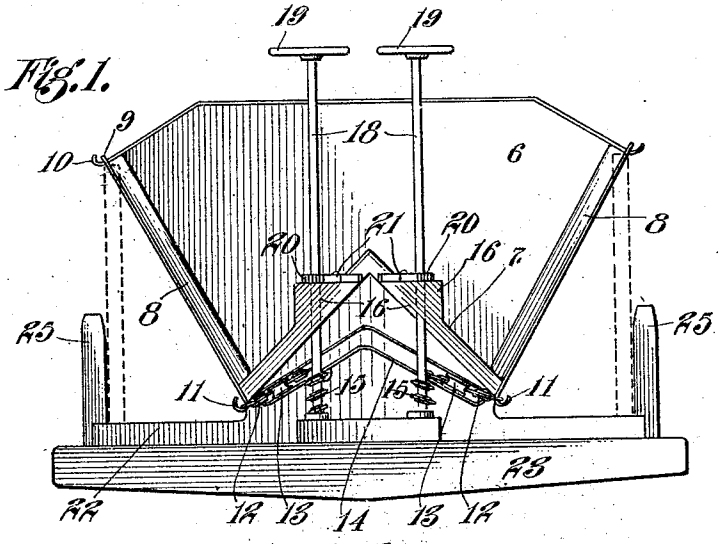
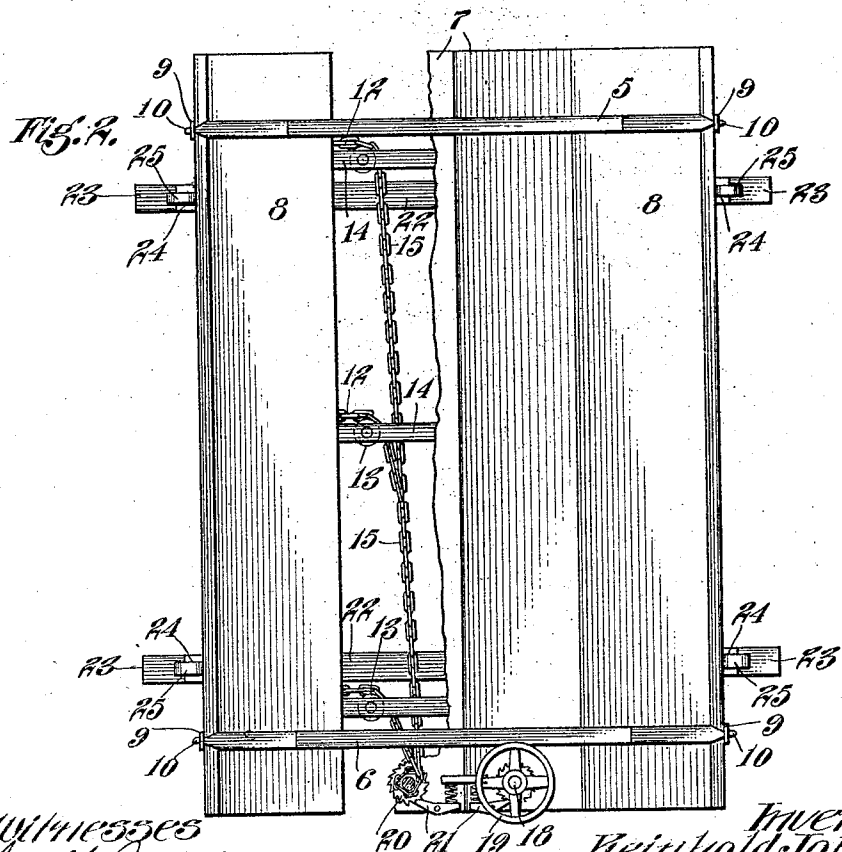


Fig. 2.



Witnesses

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DUMPING MECHANISM FOR WAGONS.

No. 842,151. Specification of Letters Patent. Patented Jan. 22, 1907.

Application filed August 13, 1906. Serial No. 330,344.

To all whom it may concern:

Be it known that I, REINHOLD JOHNSON, a citizen of Sweden, residing at Cahuenga, in the county of Los Angeles and State of California, have invented new and useful Improvements in Dumping Mechanism for Wagons, of which the following is a specification.

My invention relates to improvements in wagons which have their bodies adapted to dump their load in bulk, and particularly to that style of wagon in which the loads are dumped by the movement of the wagon sides; and the object thereof is to provide simple and effective mechanism which will hold the sides of the wagon-bed in place when the same is loaded, and which will permit the sides thereof to swing outwardly and away from the body to dump the contents out of the wagon-bed.

A further object is to provide a simple and effective mechanism by means of which only a portion of the load contained in the wagon may be dumped.

I accomplish these objects by the mechanism described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a front end elevation of a wagon-bed provided with my improved dumping mechanism. Fig. 2 is a plan view of the wagon-bed partially broken away to disclose the dumping mechanism secured beneath it.

In the drawings the bed of the wagon preferably consists of vertical end-boards 5 and 6 and a double-inclined bottom 7. This bottom inclines downwardly and outwardly from the center of the wagon-bed for the purpose of providing an even distribution of the contents from both sides of the wagon when the load is dumped. The sides 8 of the wagon are provided on their upper edges with eyes 9, which engage hooks 10 on the upper corners of the ends 5 and 6, thus permitting the sides to swing outwardly when it is desired to dump the load. The lower edges of the sides 8 are provided with a plurality of hooks 11, which are engaged by short chains 12. These chains pass around pulleys 13, which are mounted in bearing-frames 14, secured to the under side of the inclined bottom 7, and connect with chains 15, that extend longitudinally along the under side of the wagon-body. Mounted in suitable bearings 16 are vertical shafts 18, which have on their upper end hand-wheels 19. Each of these vertical shafts 18 has ratchet-wheels 20, each of which is engaged by spring-pressed dogs 21, which are secured to the bearings 16. The ends of chains 15 are connected at their front ends to the lower ends of the vertical rods 18. The wagon-body is secured on transverse frames 22, which rest on the front and rear bolsters 23. The outer ends of these frames have notches 24, which engage the standards 25, secured to the outer end of the bolsters 23.

Instead of each side having separate controlling mechanisms I may dispense with one controlling mechanism and connect the short chains 12 from each side to a single central chain, so that when the controlling mechanism is operated both sides 8 will be released at once, thus dumping the contents of the wagon at one operation.

In the operation of my device the hand-wheels 19 are rotated, so that they will take up the slack in the chains 15, and thereby bringing the sides 8 to a closed position, as indicated in Fig. 1. When it is desired to dump the contents of the wagon, the spring-pressed dogs 21 are released from the ratchets 20, so as to allow the chains to unwind and let the side-boards 8 swing outwardly until they contact with the standards 25, secured to the outer end of the bolsters, the load in the wagon falling equally from both sides. When it is desired to dump a portion of the load, only one of the side-boards 8 is let down, thus retaining a portion of the load for dumping elsewhere.

It will be seen from the foregoing description that I have produced an efficient dumping-wagon and one that is economical in construction and simple is operation. It will also be seen that the load is equally distributed on both axles, thus making it easy for the horses to draw the load.

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

1. In a device of the class described, a double-inclined bottom, said bottom inclining downwardly and outwardly from the center thereof; end-boards secured to said bottom; swinging sides hinged to said end-boards; and mechanism attached to said swinging sides and to the body whereby the movement of the sides is controlled.

2. In a device of the class described, a double-inclined bottom; end-boards secured to said bottom; sides hinged to said end-boards; side-board-controlling means se-

cured to one of said end-boards; and flexible connections between said side-boards and said controlling means whereby the movement of the sides is controlled.

3. In a device of the class described, a double-inclined bottom; end-boards secured to said bottom; sides hinged to said end-boards; vertical shafts having hand-wheels on their outer ends mounted in bearings secured to one of the end-boards; flexible connections secured to the lower ends of said shafts and to the side-boards; and locking means secured to said shafts and to one of said end-boards.

In witness that I claim the foregoing I have hereunto subscribed my name this 3d day of August, 1906.

REINHOLD JOHNSON.

Witnesses:
EDMUND A. STRAUSE,
B. M. WILKINSON.