

(No Model.)

N. BATE.
DUMPING WAGON.

No. 543,167.

Patented July 23, 1895.

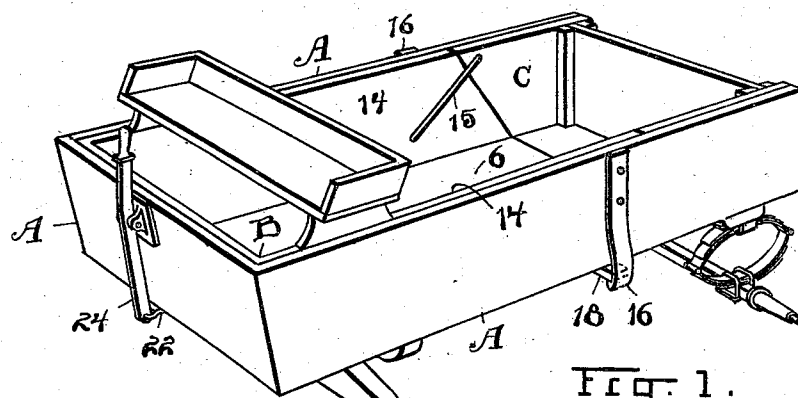


Fig. 1.

Fig. 2.

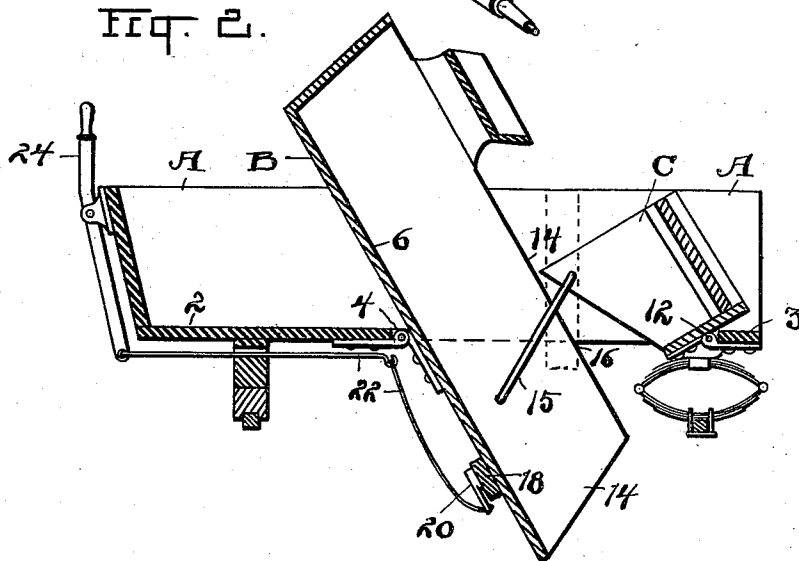
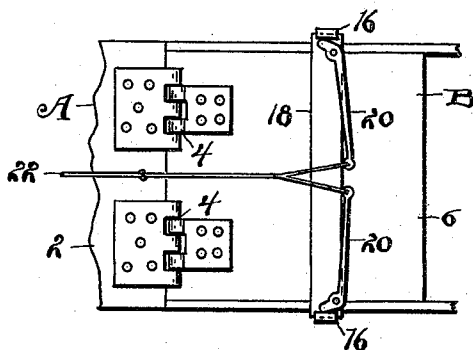


Fig. 3.



ATTEST.
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NEWTON BATE, OF CLEVELAND, OHIO.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 543,167, dated July 23, 1895.

Application filed December 13, 1894. Serial No. 531,687. (No model.)

To all whom it may concern:

Be it known that I, NEWTON BATE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Dumping-Wagons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to dumping-wagons; and the invention consists in a wagon having a complete and single outer body of any desired depth, according to the use to which it is to be applied, and a sectional inner body fitting closely within the outer one, and having the sections connected so as to operate together, all substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of one of my improved wagons less the wheels. Fig. 2 is a longitudinal sectional elevation thereof, showing the inner body in a dumping position. Fig. 3 is a bottom plan view of the inner body, showing its hinge connections and unlocking mechanism.

A represents the outer body of the wagon. This body has sides and ends like an ordinary wagon or like any wagon of its kind, depending on the purpose for which it is built. If for coal the said body would of course have greater depth than if made to haul gravel. It has also a section of floor 2 extending from the front to near its middle and a short section of floor 3 at its rear, though this may be only a cross board or piece of requisite depth to serve the purpose of the said part, as here shown.

The main section B of the inner sectional body is supported by suitable hinges 4 on the inner edge of the bottom 2 of the outer body, and if the bottom 2 requires strengthening at this point for said hinges it may have a suitable cross-piece of wood or metal on its under side. The said body B is shown here as of the same depth as the outer body and as fitting closely within the outer body at the sides and ends. It is closed at its front and has a bottom 6 of its own the entire length

and is hinged at its center, as shown. This makes it easy to tilt and dump and to restore to its normal position; but in order that the dumping may be made complete with a wagon of ordinary elevation of wheels, it is necessary that the inner body should be sectioned transversely, so as not to have any part thereof so long that it will not at once come to a complete dumping and unloading position when the tilting of the body has been effected. Hence I have cross-sectioned the inner body as near the rear end thereof as perfect dumping will allow, and this gives me all the advantage I could possibly have if I used a full-length inner body and could tilt it enough to unload by driving the team ahead and leave the load in a heap, because this is what I really do accomplish by my construction. A full-length body is not practical to dump in this way where long wagon-bodies of this kind are used, and especially when they have the usually comparatively-low wheels, and hence I employ the sectional body B C and make the section C as short as the elevation of the wagon will allow. This section likewise is hinged at its bottom to tilt and has hinges 12 securing it to floor-section 3.

The sides 14 of the body B are cut on a rearward and downward slant, so as to adapt them to the tilting and return operations from below, and a pivot connecting-rod 15 on each side engages on the upper and inner corner of the short section C and in the side of the section B, at just such distance from the hinge or tilting point thereof as to give the short section a partial but sufficient tilt to unload, while the section B itself assumes a much more acute inclination. The short section C is thus made entirely dependent on the long section, and is not only automatically operated thereby, but is held in its raised position by no other means than the pivot controlling rods or links 15 and the inclined edges of the sides. Now, in order that the body-section B may be automatically engaged and held when raised to carry a load I have adopted spring metal catches 16, fixed on the outside of the outer body A and in such relation as to come near to the rear of the inner section. Then across the bottom of the inner section, and projecting over or past the sides thereof, is a cross-

piece 18, which at its ends engages over the beveled catches 16 when the said body B is raised and the parts are temporarily locked together. To release the locks and tilt the body B I have provided a simple mechanism, consisting in the two similar levers 20, pivoted on the cross-piece 18, and having their short arms adapted to bear against the spring catches 16 and press them out of engagement with the cross-piece 18, and their long arms connected by a cord or wire 22, which is operated by a hand-lever 24 and the front of the wagon. When the body B has been unloaded the cross-piece automatically engages again in the spring-catches 16. Obviously this mechanism may be varied and modified and yet serve my purpose, so that I do not consider the means shown for holding body B up and for releasing it as the only means that can be used for this purpose or the limit of my invention in this behalf.

What I claim is—

1. The wagon described, having a rigid outer body and an inner body in two parts supported on hinges to be dumped, a pivot link connection between said parts, catches on the outer body and a lock on one of the

pivoted parts to engage the said catches, substantially as set forth.

2. A wagon having a dumping body with bottom and sides formed in two sections of different lengths and the shorter section in the rear, and a link connecting the free ends of said sections and arranged to tilt and hold the shorter section in all its positions, substantially as set forth.

3. A dumping wagon having an outer body, an inner body composed of two sections of varying lengths, the longer section pivoted midway its length near the center of the outer body, the shorter section pivoted on the rear of the outer body, a link connection between said sections at their discharging ends and pivoted in each, whereby the shorter section is controlled through the longer one, and a lock to engage and hold up the longer section, substantially as set forth.

Witness my hand to the foregoing specification this 23d day of August, 1894.

NEWTON BATE.

Witnesses:

H. T. FISHER,
GEORGIA SCHAEFFER.