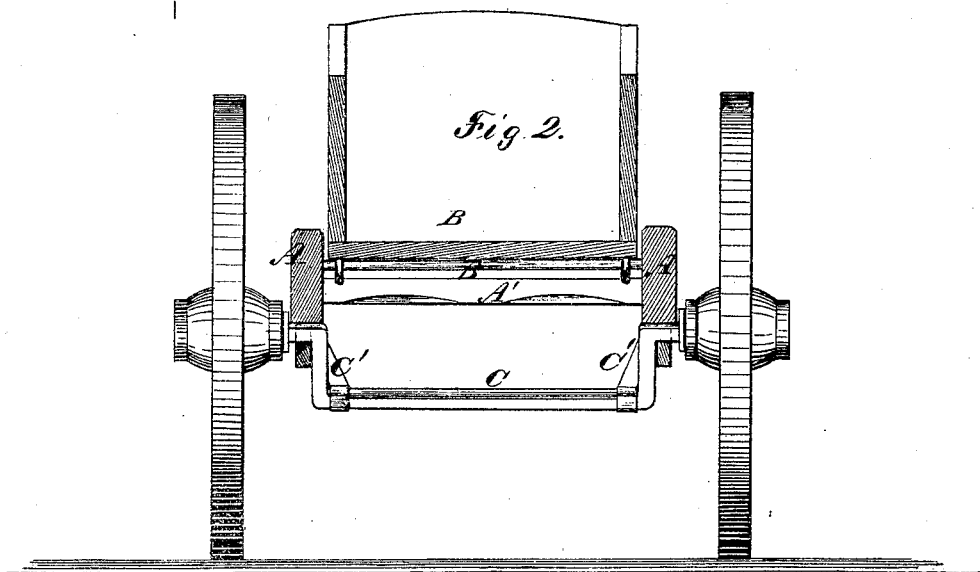
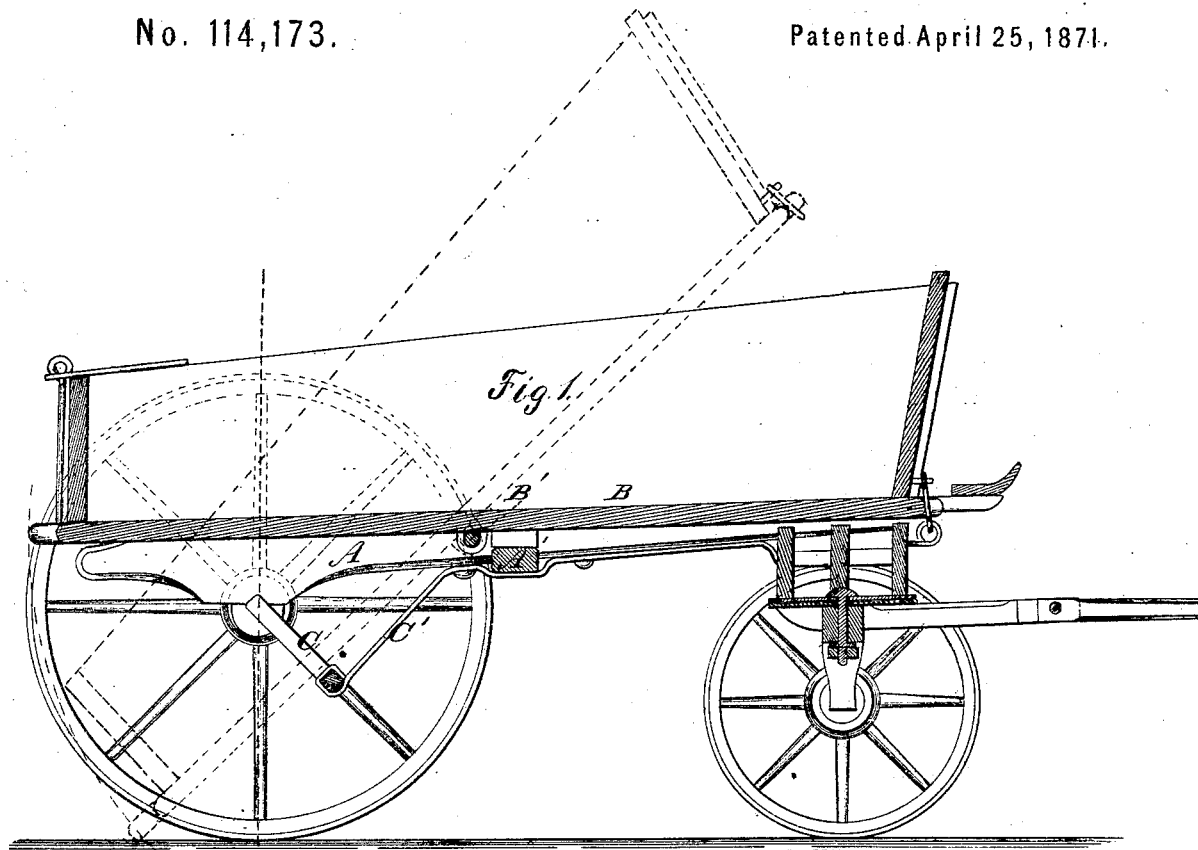


S. D. McCaleb & WILLIAM McCaleb.
Improvement in Dumping-Wagons.

No. 114,173.

Patented April 25, 1871.



Witnesses:
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SAMUEL D. McCALEB AND WILLIAM McCALEB, OF LOUISVILLE,
KENTUCKY.

Letters Patent No. 114,173, dated April 25, 1871.

IMPROVEMENT IN DUMPING-WAGONS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, SAMUEL D. McCALEB and WILLIAM McCALEB, of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain Improvement in Dumping-Wagons; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a vertical longitudinal section of our improved dumping-wagon.

Figure 2 is a transverse section thereof.

The same letters are used in both figures in the designation of identical parts.

This invention relates to four-wheeled dumping-wagons constructed to discharge the load at the rear, in which the body oscillates on an axis located between the wheels, and in which the rear axle is cranked to admit of the tilting of the body.

Our improvement consists in the arrangement of the cranked portion of the rear axle, which is turned to stand at an angle of about forty-five degrees to a vertical line drawn through the axis of its journals, for the purpose of enabling it to pass over all ordinary obstructions in the road without necessitating the undue elongation of the crank, which results if the axle be turned up to a horizontal position, as in the latter case such axle must extend forward at least to the point where the body is pivoted.

To enable those skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

The frame A of the wagon is mounted upon four wheels, the front ones of which are sufficiently small to be turned under it, the frame at this end being attached to the front axle by means of bolsters and the ordinary fifth-wheel, in the manner shown.

At A', between the front and rear axle, the frame has a stout cross-bar, which, together with the bolsters at the front end, form support for the body B of the wagon when in the position shown in fig. 1 in full lines.

The frame in rear of the cross-bar A' has no trans-

verse beams to permit the body to tilt between its sides.

The body B is hinged upon a stout transverse bolt or shaft, B', arranged in the frame directly in rear of the cross-bar A', where its weight, when loaded, is about balanced.

To prevent the unseasonable tilting of the body its forward end carries a hook, b, by which it may be secured to a staple, b', on the bolsters. Any other ordinary devices may, however, be used for this purpose.

To clear the body in dumping the load the rear axle C is cranked and turned forward until its cranked portion stands at an angle of forty-five degrees, more or less, to a vertical line drawn through the axis of its journals. In this position it is firmly secured by braces C' to the frame.

We do not claim broadly a cranked rear axle in four-wheeled dumping-wagons, as cranked axles have been employed in this connection. But, in all cases, such cranked axle has been arranged either to hang down vertically or in a horizontal position. The former arrangement is objectionable, because the axle hangs down too low, coming so near to the surface of the road that it will not clear ordinary obstructions, while the latter arrangement requires that the axle should be cranked far enough to extend forward to the point where the body is hinged, thus making the crank unduly long, and, consequently, weakening the axle. By our arrangement these objections are all overcome.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a four-wheeled dumping-wagon, the cranked rear axle C, but only when its cranked portion is turned forward to stand about midway between a horizontal and vertical position, in the manner and for the purpose shown and described.

SAML. D. McCALEB.
WILLIAM McCALEB.

Witnesses:

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