

## Dumping Wagon.

Patented Sept. 7, 1869.





# United States Patent Office.

DAVID S. GARDNER, OF BRISTOL, MARYLAND.

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## 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 I, DAVID S. GARDNER, of Bristol, in the county of Anne Arundel, and in the State of Maryland, have invented certain new and useful Improvements in Dumping-Carts or Wagons; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which drawings—

Figure 1 is a plan view of my invention.

Figure 2 is a side elevation of the same on the line *x x*, fig. 1.

Figure 3 is a broken section of the end of a cross-bar of the lower body, showing the method of securing the metallic strap thereon.

Like letters represent like parts in each figure.

The nature of my invention is an improvement in dumping-wagons, particularly for agricultural uses, and consists, mainly, in an upper body, which traverses back and forth upon trucks working in channels in the rails of the lower body, and upon a roller at the rear end of the lower body. This upper body is so constructed that it is held by its own weight in position upon the lower body, and may be lifted from the same without removing screws or other fastenings. The side rails to the lower body may also be readily removed or replaced by the use of a new and peculiarly-fastened metallic strap, and, when removed, any common wagon-body may be placed upon the same running-gear.

A more particular description of my invention is as follows, viz:

I make a wooden frame, of suitable dimensions, consisting of two side pieces or rails, A, and three cross-bars, B.

To the outer side of these rails, and extending nearly to each end of the same, are secured guides C, of sheet-metal, which extend below the bottoms of said rails, so as to rest against the outsides of the rails of the lower body.

The bottoms and ends of said rails A are covered with sheet-metal, and near the front under side in each is a circular depression, D.

Under the centre bar B, and at each end of it, and secured to the inner sides of the rails A, are the hooks E, projecting downward below the bottom of the rails A, and with their points to the rear.

To the inner sides of said rails A, and near the front ends thereof, are secured the ears F, which incline, at the bottom, toward the front, and extend a little below the bottom of said rails, and slope upward and forward at their own bottoms.

The lower-body of this device consists of two side pieces or rails G, with two cross-bars H, and is designed to sit upon the under frame of a wagon. These rails G have their sides covered, for about half of their

length forward, with sheet-metal, and a smaller portion of their sides, at the rear end, covered in the same way.

The rails G are fastened to the cross-bars H by metallic straps I, which are strips of metal, a little narrower than the thickness, sideways, of the rails G, and are pivoted, at their upper ends, to the ends of the sheet-metal described as covering the sides of said rails G, and upon the top of the same; thence they bend downward, so as to cover the ends of said rails G, and then toward the centre of said rails, passing under the cross-bars H, and secured to said rails by nuts K, upon bolts which pass down through said rails and straps.

The cross-bars H are halved into the ends of the rails G, so that the bottoms of them are on a line with the bottoms of the rails.

A rod, L, with lever M, is pivoted on the top of the front end of the rails G.

This rod has upon it, at the point where it touches the inner sides of the rails G, two tripping-lugs N, which project above said rod when the lever M is parallel with the rail G, and points to the rear.

Behind this rod L, and working upon their own shafts, in slots O, in the metallic side pieces to rails G, and between said side pieces, are two friction metallic rollers P.

The metallic shaft Q is pivoted on the extreme rear end of the rails G, at the top of the same, upon open bearings in the metallic side plates to the same, and has rollers solidly secured to the same, revolving in the space between said metallic side plates, and rising to the level of the top surface of the rails G.

It is intended to use this device with stakes to support a load, or boxed up in the usual way of wagon-bodies.

In operating this device, the upper body or frame A B is placed upon the lower body or frame G H, so that the friction-rollers P will be near the front of the cavity in which they work, and under and fitting into the depression D; the guides C will be on the outside of the rails G; the hooks E on the inside of said rails; the lever M will point upward; and the front of the ears F just rest upon the tripping-lugs N. In this position, the rails A rest upon the rails G their entire length.

With these frames so adjusted, and upon a proper wagon-body, and loaded, if the driver wishes to dump his load, he presses down the lever M, which raises the front of the frame A B, and pushes it toward the rear, disengaging the rollers P from the depression D, and bringing the smooth under side of the rails A to rest upon said rollers, which, with the rollers R, now sustain the whole load, which may be easily pushed to the rear.

When the hooks E engage with the shaft Q, the top



frame A B will tip up, and the load be dumped. The driver then tips back the top A B by hand, and rolls it forward into position.

If it is desired to remove all the apparatus of this device after the top body is lifted off, the nuts K may be unscrewed, and the pivoted straps I lifted, disengaging the rails G, which can then be taken off, and any ordinary wagon-body placed upon the cross-bars H.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of the rails G, of wood, for dumping-wagons, with sides partially covered with sheet-metal, as described above, for the purpose of affording channels for friction-rollers, as above set forth.

Also, the arrangement of the friction-rollers P, as constructed, and operating in channels in the rails G, and in the slots O, for the purpose above mentioned.

Also, the arrangement of the friction-rollers R, as constructed, upon shaft Q, and operating in channels at the rear end of the rails G, for the purpose aforesaid.

Also, the arrangement of the hooks E, as constructed, and for the purpose before named.

Also, the arrangement of the shaft L, the lever M, and tripping-lugs N, as for the purpose aforesaid.

Also, the arrangement of the metallic straps I, constructed and operating as above described.

Also, the arrangement of the upper rails A; the guides C, and the ears F, as and for the purpose aforesaid.

Also, the combination of the upper frame A B, provided with the guides C, hooks E, and ears F, with the lower frame G H, provided with the friction-rollers P and R, shaft Q, metallic straps I, shaft L, lever M, and tripping-lugs N, in connection with suitable running-gear of a wagon, and operating as before mentioned.

In testimony that I claim the foregoing, I have hereunto set my hand, this 13th day of May, 1869.

Witnesses:

DAVID S. GARDNER.

GEO. S. PRINDLE,

EDM. F. BROWN,