

(No Model.)

G. W. RICHARDSON.

DUMP WAGON.

No. 377,331.

Patented Jan. 31, 1888.

Fig. I.

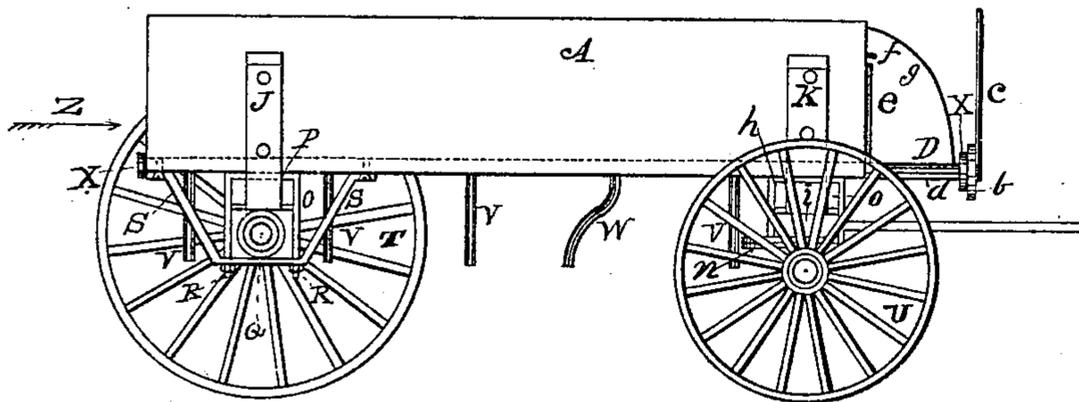


Fig. II.

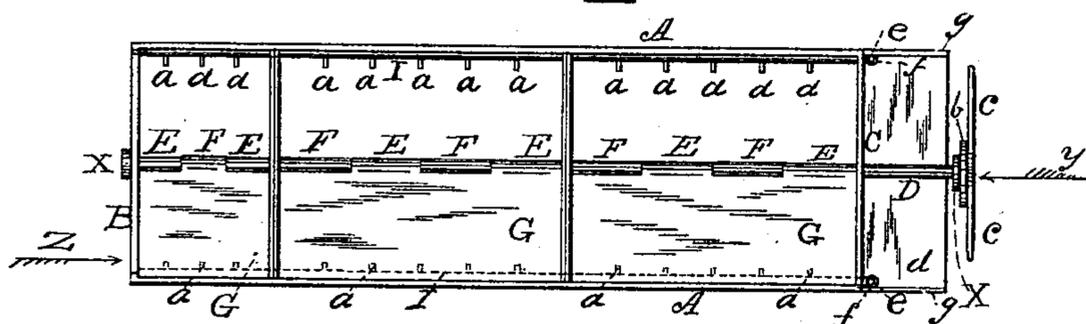


Fig. III.

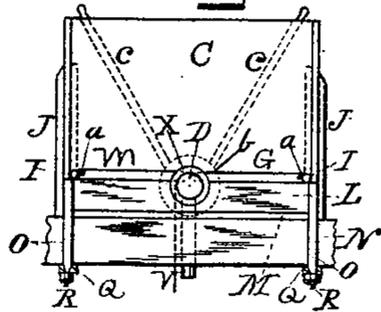


Fig. IV.

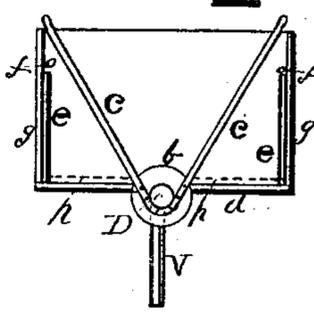
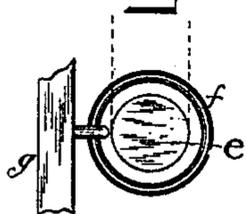


Fig. V.



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DUMP-WAGON.

SPECIFICATION forming part of Letters Patent No. 377,331, dated January 31, 1888.

Application filed October 20, 1887. Serial No. 252,874. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. RICHARDSON, a citizen of the United States, and a resident of Chicago, county of Cook, State of Illinois, have invented new and useful Improvements in Dump-Wagons, of which the following is a specification, reference being had to the accompanying drawings, illustrating the invention, in which—

Figure 1 is a side elevation of a dump-wagon in which my invention is embodied; Fig. 2, a top or plan view of Fig. 1 with the wheels removed; Fig. 3, an end elevation of Figs. 1 and 2, looking in the direction indicated by dart Z; Fig. 4, a front elevation of Fig. 2, looking in the direction indicated by dart Y; Fig. 5, an enlarged view of one of the rings which hold the operating-levers in place.

This invention will be fully understood from the following description.

A A represent the sides, B the rear end, and C the front end, of the box.

d, Figs. 1, 2, and 4, is a fixed bottom in front of the box, and *g g* are side-boards to it, one of which is removed at Fig. 1, more clearly to show the parts.

D represents a shaft, which is preferably of hollow iron, extending longitudinally and centrally through the bottom box and over the fixed bottom *d*, and it is held in position by a metal collar, X, at each end, and to the front end of the shaft D is affixed a plate, *b*, and to the plate are affixed two levers, *c c*, and to the under side of the shaft D are affixed stiff downwardly-projecting prongs V V V V W, for the purpose of elevating the dump-bottoms G *m*, the prong W being curved, that it may be out of the way of the front wheel, U. The dump-bottoms G are hinged to the shaft D at E, and the bottoms *m*, on the opposite side of the shaft, are hinged to it at F, as shown at Figs. 2 and 3. A rod, I, lying inside and close to the bottom of both side-boards A A, has bearings in the end-board B C, so that it may be turned by an upwardly-projecting end-part, *e*. The sides of the rods I are provided with pins *a a a*, &c.,

to support the free edges of the dump-bottoms *m G*. The links *f*, Figs. 1, 2, 4, and 5, are put over the upward-projecting parts *e* of the rods I, to hold the pins *a* level.

At Figs. 2 and 3 the bottoms G are represented as resting on the pins *a*, and the bottoms *m* are shown to be swung down as when a load is to be dumped. The bottoms G *m* are allowed to fall down by removing the rings *f*, which will, by the weight of the load on the bottoms, bring the projecting parts *e* in positions shown by dotted lines *p*, and the pins will project downward. The bottoms are elevated by turning the levers *c c*, so as to bring the prongs V W to horizontal positions, and the bottoms are then locked by turning the parts *e e* to vertical positions and securing them by the links *f f*. The reason for the two levers *c* is to have one lever at all times in convenient position for use.

It is necessary in this kind of a wagon to have the bottom of the box well up from the axle-trees, for generally small wheels, T U, are employed, and also to have the box strongly supported.

N is the rear axle-tree, and L is the bolster, between which and the axle-tree is placed the lower portion, M, of a bar of iron, which extends up on and is fastened to each side of the box, as shown at J J, and passing over the bolster L, at each end, is a strap of iron, O, which, by nuts and bolts K, is secured to a brace, Q S, whose top ends are secured to the box A. By this means the axle-tree bolster and box attachment is sufficiently strong to support the great weight required in hauling broken stone and coal, and at a proper height for the box to clear its dumped load. The forward bolster is secured by a similar support, O K, to the turn-table *i n*, which gives to the forward connection suitable strength.

I claim and desire to secure by Letters Patent—

1. In dumping-wagons, the box A B C, combined with the longitudinal central shaft D, with the hinged bottoms G *m*, the shaft

provided with the prongs V W, in combination with the levers *c c*, for elevating the bottoms, as specified.

2. The shaft D, provided with the prongs V W and levers *c c*, in combination with box A B C, the bottoms G *m*, the shafts *i e*, provided with the pins *a*, and the links *f*, as specified.

3. The box A B C, bottoms G *m*, rod D,

elevated bolster L, the plates M J, and braces S Q, substantially as and for the purpose specified.

October 13, 1887.

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Witnesses:

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