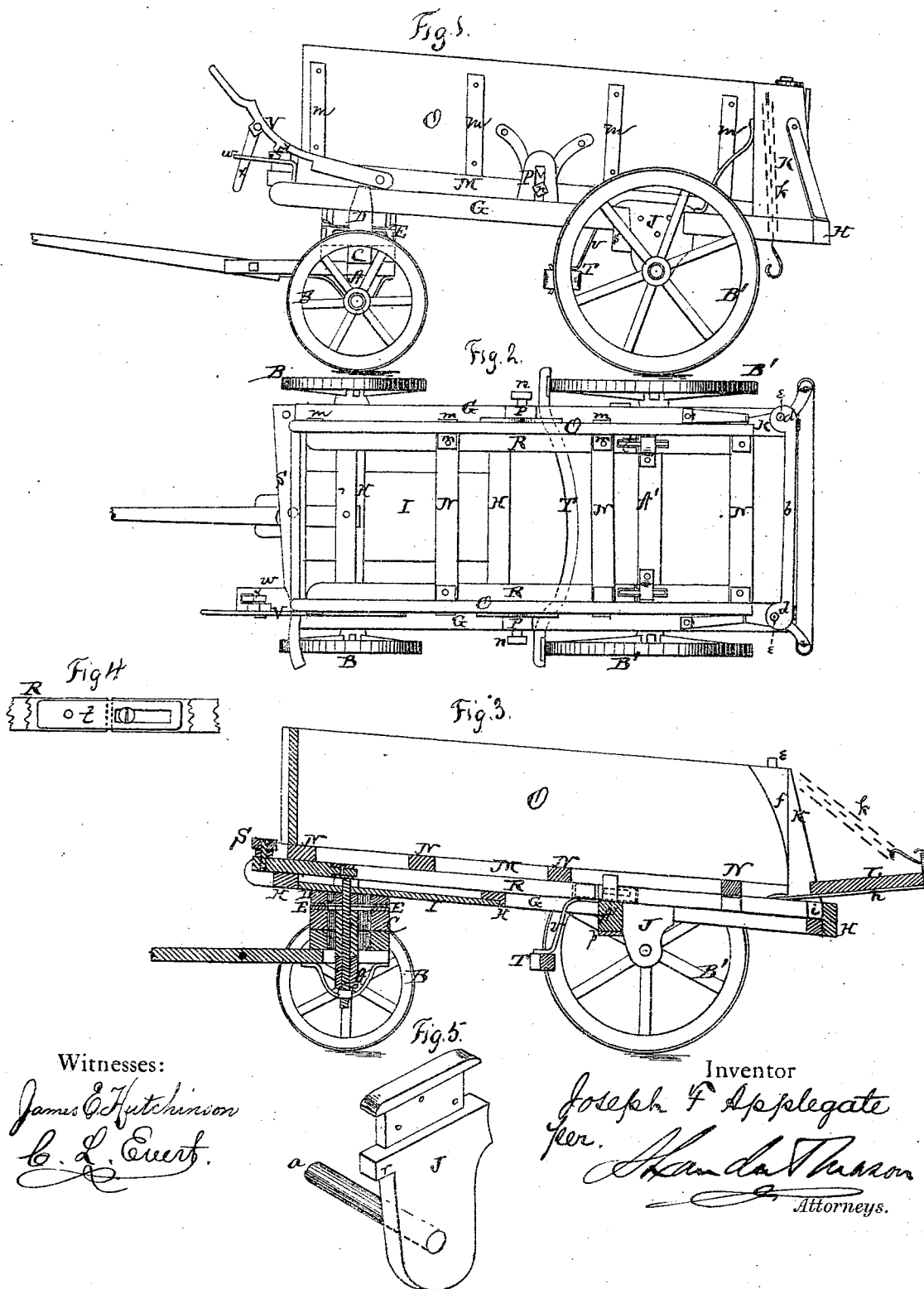


JOSEPH F. APPLGATE.

Improvement in Dumping Wagons.

No. 123,440.

Patented Feb. 6, 1872.



UNITED STATES PATENT OFFICE.

JOSEPH F. APPLGATE, OF NEW ALBANY, INDIANA.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. 123,440, dated February 6, 1872.

To all whom it may concern:

Be it known that I, JOSEPH F. APPLGATE, of New Albany, in the county of Floyd and in the State of Indiana, have invented certain new and useful Improvements in Dumping-Wagon; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "dumping-wagon," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view; Fig. 2, a plan view; and Fig. 3, a longitudinal vertical section of my dumping-wagon. Fig. 4 is a section of the sliding bar, which operates the brake and the wagon-body; and Fig. 5 is an enlarged perspective view of a casting attached to the wagon-bed, and to which the hind wheel is connected.

A represents the front axle, with its wheels B B. C is the front hound, and D the front bolster. E represents the fifth-wheel, made in the usual way, and attached one part to the hound and the other part to the bolster, but with the following difference: Generally the screws or bolts which secure the fifth-wheel in its place are passed through the face of the wheel; but I provide the two parts of said wheel with ears, and the screws pass through the same, thus leaving the faces of the wheel, which come in contact with each other, perfectly smooth. G G are the side beams, and H H the cross-bars connecting the same, which, together, form the bed of my dumping-wagon, said bed being firmly attached to and resting upon the hound C. In the front part of this bed is a platform, I, which entirely covers the fifth-wheel, and thus protects the same, preventing any dirt from the wagon-box above from coming in between the faces of the wheel. To each side beam G, a suitable distance from its rear end, is attached a casting, J, constructed as shown in Fig. 5, so as to be let into the

outer side of the beam, and clamp it on both the upper and lower sides. It is then further secured by screws or bolts. This casting extends a suitable distance below the beam G, and has near its lower end a solid or hollow spindle, *a*, extending outward, upon which the hind wheel B' is placed. At the rear ends of the beams G G are standards K K, between which the end board L is placed, said end board being on its upper edge provided with a metal strap, *b*, which has projecting ears *d d*, with holes at the ends, as shown in Fig. 2, to fit over pins *e e*, on the top of the standards. Cleats *f f* are attached on the inner sides of said standards, and on the outside of the end board at each end is a metal bar, *h*, projecting below the lower edge of the end board, and fitting on the inside of a small block, *i*, attached to the rear cross-bar H. By these means the end board is held stationary, and still it may be taken out and placed in the position shown in Fig. 3, supported by chains *k*, for the purpose of taking out any articles from the box without dumping. The dumping-frame is composed of two parallel side beams, M M, connected by means of cross-bars N N, and upon the ends of each of said cross-bars are secured iron standards *m m*, to which the wagon-box O is firmly secured. Into suitable metal plates or castings, attached to the box and frame thus constructed, are screwed headed pins *n n*, which form the journals upon which the wagon-box turns, said pins or journals passing through vertically-slotted standards P P, attached to the side beams G G. When the box is dumped so that the rear end rests upon the ground it often happens that the contents will not fall out because the incline is not steep enough. This difficulty is obviated by the slotted standards P P, for, when the box is tilted, it is only necessary to back the horses slightly when the journals will slide up in said standards and raise the box nearly to a perpendicular position. To the under sides of the beams M M, and parallel with the cross-bars N N, is secured what I call a false axle, A', having along its under side a metal bar, *p*, the ends of which are turned up, forming clamps *s*. These clamps, when the box is raised to its proper position, grasp the castings J at the shoulders *r* and the

beams G, thus bracing and strengthening the same. In suitable guides attached to the inner sides of the dumping-frame M N are placed two jointed bars, R R, the front ends of which are connected together by a cross-bar, and said cross-bar connected to a lever, S, pivoted at the front end of one of the side beams M. Each bar R is made in two parts, the adjoining ends of the two parts being forked or slotted, and a metal bar, *t*, inserted in the same, forming the connection. One end of the metal bar *t* is slotted, as shown in Fig. 4, and slides over a pin or screw in the rear part of the bar R, so that the front part thereof may be moved a certain distance back and forth without disturbing the rear parts. The extreme rear ends of the bars R R are intended to rest upon a cross-bar at the rear ends of the side beams G G, and thus support the wagon-box. To the under side of the front parts of the sliding bars R R, near the joints, are attached arms *v v*, to the lower ends of which a brake-bar, T, is secured, said brake-bar having any suitable brake-blocks attached to it, which are operated by the motion of the front parts of the bars R R. The outer end of the lever S rests upon an arm, *w*, extending forward from the opposite side of the wagon-box, and on this side is also pivoted a lever, V, having an arm, *x*, pivoted to it, which arm passes through a hole in the outer end of the arm *w*. The lever S, being moved close to the end of the box, applies the brakes to the hind wheels, and by letting the lever V down so that the notch *y* in the same catches on the lever S the wheels become locked.

By raising said lever V far enough so as to release the lever S, and moving this latter as far out as the arm *x* will permit, the brakes are thrown off; but the said arm *x* prevents, by any accident, the rear parts of the bars R R from being withdrawn so as to dump the wagon. When it is desired to dump the load the lever V is raised so as to carry the arm *x* out of the hole in the arm *w*, when the lever S can be thrown out far enough to draw the extreme rear ends of the bars R R away from their supports, thus dumping and unloading the wagon.

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

1. A dumping wagon-box, having the journals upon which it turns placed in vertical slots so as to allow of an up-and-down motion, substantially as and for the purposes herein set forth.

2. The arrangement, in the frame or bed of a dumping-wagon, of a platform, I, above and protecting the fifth-wheel, substantially as and for the purposes herein set forth.

3. The combination of the standards K K with cleats *f f* and pins *e e*, and the tail-board L, with its metal bars *h h* and strap *b*, having ears *d d*, all substantially as and for the purposes herein set forth.

4. The jointed sliding bars R R, arranged in the frame of the dumping wagon-box for operating the brakes and supporting or holding the wagon-box in proper position, substantially as herein set forth.

5. The combination of the sliding bars R R, each made in two parts and joined together by the slotted metal bars *t t*, the levers S V, and arms *w x*, all constructed and arranged substantially as and for the purposes herein set forth.

6. The casting J, constructed substantially as shown and described, with the shoulder *r* and spindle *a*, and attached to the side beam G, substantially as and for the purposes herein set forth.

7. The combination of the box M N O, journals *n n*, and slotted standards P P, substantially as and for the purposes herein set forth.

8. The combination of the frame M N, iron standards *m m*, and box O, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of January, 1872.

JOSEPH F. APPLGATE.

Witnesses:

A. N. MARR,
EDM. F. BROWN.