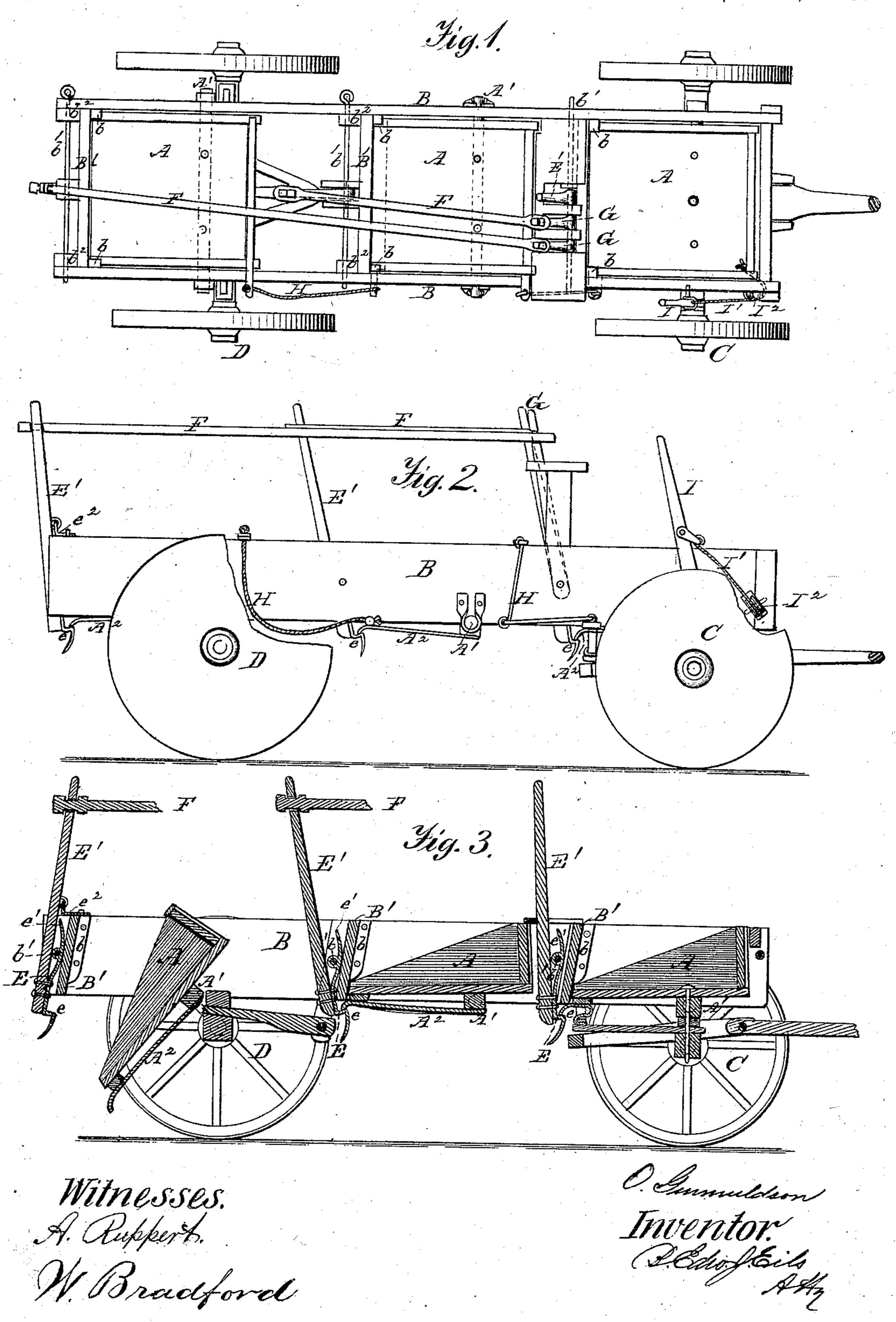
O. GUNNULDSON. Dumping-Wagons.

No. 138,395.

Patented April 29, 1873.



AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

OLE GUNNULDSON, OF CHRISTIANA, WISCONSIN.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. 138,395, dated April 29, 1873; application filed February 10, 1873.

To all whom it may concern:

Be it known that I, OLE GUNNULDSON, of Christiana, in the county of Dane and State of Wisconsin, have invented certain Improvements in Fertilizer-Distributers, of which the following is a specification:

This invention relates to that class of dumping-wagons having a series of independent dumping-boxes, which may be tilted successively by the driver without stopping his team.

My improvement consists, first, in combining with the several dumping-boxes permanent partitions extending across the frame, which serve to close the open ends of the boxes when loaded. In wagons of this character, as heretofore made, the closed end of one box was used to cover the open end of the adjacent box, which is objectionable, because the dumping of one box left the next one in condition to have its contents discharged by the jolting of the wagon. Second, in connecting the several boxes by chains, ropes, or their equivalents in such a manner that a box in the act of dumping its load will elevate an adjacent box, previously tilted, and lock it to its support.

Figure 1 is a plan view of my improved fertilizer-distributer. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical longitudinal section, showing one of the boxes in the dumping position.

The same letters of reference are employed in all the figures in the designation of ident-

ical parts.

In the example illustrated, three dumpingboxes, A, are provided, which turn on transverse horizontal axes A1, having their bearings on the side timbers of the rectangular frame B within which the dumping-boxes operate. The transverse timbers B' bear, with one side against cleats b, on the side timbers of the frame, and are held securely in place by detachable bolts b^1 which pass through the side timbers and flanges or ears b^2 on the transverse timbers. On withdrawing the bolts b^{1} , the frame comes apart, also detaching the | dumping-boxes and most of the mechanism for operating the same. The frame and boxes, together with their several adjuncts, are supported upon the trucks C and D, the front one, C, being connected thereto by the king-

bolt in the usual manner, to permit of its turning, while the rear truck is so connected to the frame as to prevent lateral oscillation. The several dumping-boxes are open at one end, and they are so hung to the frame that, when loaded, the preponderance of weight will be upon the side of the axes adjacent to their open ends, which preferably point rearward. This end fits closely against the transverse timbers B', when the boxes are in position to be loaded or are loaded, and is then supported by means of a rigid projecting tongue, A², upon a hook, e, of a lever, which is pivoted upon the rod b^1 . This lever may be constructed of a long wooden handle, E', and an iron bar, E, secured to its lower end. The iron bar has the hook e formed upon it, and its lower end is curved back to facilitate its automatic action on elevating the box; it also has an ear to receive the fulcrum-pin, and terminates at its upper end in a spring, e1, which, bearing against the timber B', has a tendency to hold the lever in position for supporting its box. The levers are, with their lower ends, located between cleats upon the timbers B', and may have plates e² attached, serving as covers to exclude dirt. The lever which supports the front dumping-box can be operated directly by the driver, being near his seat; the other levers are connected, respectively, by rods F to hand-levers G arranged upon one side of the seat. The open end of each dumping-box is connected by a chain, rope, or equivalent device H to the adjacent closed end of the succeeding box in such a manner that, on dumping the load of one of the boxes, the connecting-chain will draw up the open end of the box immediately in front of it and lock it to its supporting-lever. The front box is thus elevated, after discharging its load, by means of a lever, I, and chain or rope I1 which reeves over a pulley, I2, and is secured with one end to the front or closed end of the box. This box supports the front end of the frame, and, being connected by the king-bolt to the front axle, is dumped, after its release from its supporting-lever, by the forward progression of the wagon oscillating with it the axle and fifth-wheel and connections.

My improvements may be applied to the running-gear of any ordinary farm-wagon,

the only requirement being the removal of the long reach and the substitution of short ones in place thereof, as shown.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. The combination of the dumping-boxes A, their supporting-levers and permanent partitions or timbers B', all arranged and to operate substantially as specified.

2. The dumping-boxes A connected by chains H or their equivalents, substantially

as and for the purpose specified.

3. The combination of the eccentrically-hung dumping-boxes, their supporting-levers and chains H, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

OLE GUNNULDSON.

Witnesses:

CHESTER TELLEFSON, THEODORE TELLEFSON.