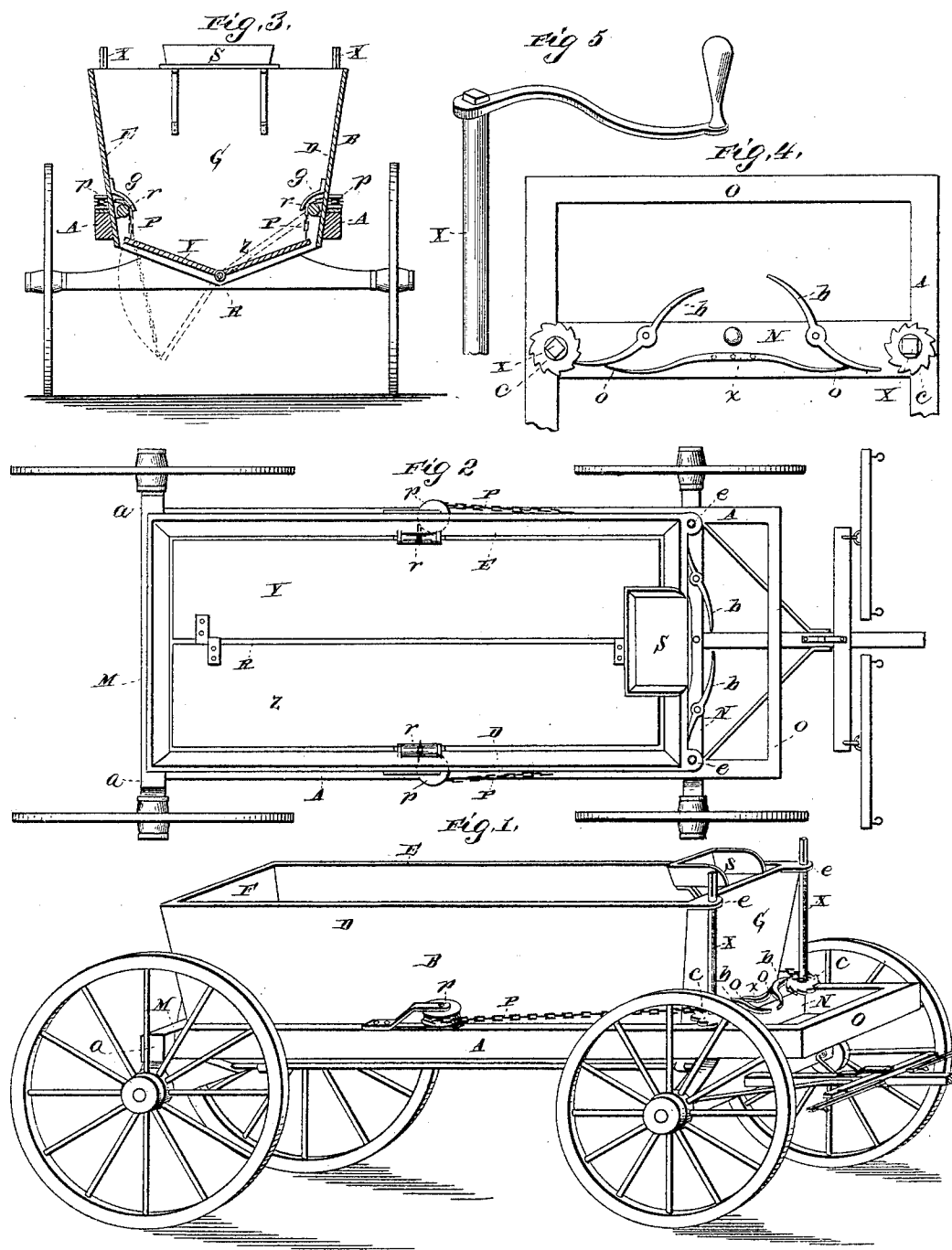


(No Model.)

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DUMPING WAGON.

No. 467,959.

Patented Feb. 2, 1892.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GUSTAF A. STENBACK AND JOHN ERICKSON, OF SIOUX CITY, IOWA.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 467,959, dated February 2, 1892.

Application filed June 4, 1891. Serial No. 395,150. (No model.)

*To all whom it may concern:*

Be it known that we, GUSTAF A. STENBACK and JOHN ERICKSON, citizens of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Dirt-Dumping Devices; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention has relation to devices for dumping dirt; and the object is to provide what we call a "dumping device," which allows the dirt to be dumped from either side, thus saving a large amount of shoveling and avoiding a second handling of the dirt, and also insuring greater safety to the driver. Our invention therefore consists in the novel construction of parts and the combination thereof, as will be hereinafter fully described, and specifically set forth in the claims.

We have fully illustrated our invention in the accompanying drawings, wherein—

Figure 1 is a view of our entire invention as it appears when mounted on wheels and ready for operation. Fig. 2 is a view showing the inside of dump-box. Fig. 3 is a sectional view. Fig. 4 is a view of foot-brakes and spring, showing their position on the frame that supports the dump-box. Fig. 5 is a view of a crank that may be used in the operation of our device.

For the purpose of a clearer description we call our device a "dumping device."

Referring now to the illustrations, wherein like parts are designated by similar letters of reference, A designates a rectangular frame adapted to be mounted upon wheels, the side rails being connected by the rear cross-piece M, provided with side extensions *a a* and adapted to rest upon and be secured to the rear axle and the cross-piece O, which forms the front side of the frame. Upon the cross-piece N are secured the foot-braces *b b*, which are made to engage the ratchet-wheel *c c* upon the posts X X by means of spring *x*, having bearing sides *o o*.

X X are circular posts having upper ends

squared, so that they may be easily grasped and made to revolve by means of a wrench-wheel or crank-arm to wind or unwind the chains, for the purpose hereinafter specified. These posts set into the cross-piece N of the frame A and extend upward through the ears or extension-pieces *ee* of the dump-box B for the purpose of holding the front of said dump-box firmly in position. These posts are provided with ratchet-wheels *c c*, adapted to engage the foot-brakes *b b* for the purpose of keeping the posts from turning when the dump-box is filled with dirt.

S designates a seat for the driver or operator.

B designates a dump-box, which consists of side plates D and E and end plates F and G, suitably fastened together, these plates having an inward inclination from top to bottom. The end plate G is provided with the ears or extension-pieces *ee*, with openings to receive the posts X X, substantially as shown in the drawings.

The bottom of the dump-box consists of the plates Y and Z, loosely hinge-jointed to the rod R, which passes through the bottom of plates F and G, which are provided with suitable openings and which in a V-shaped manner incline downward to receive the ends of said rod. The bottom plates Y and Z are provided with suitable rings, to which chains may be attached or connected.

P P designate chains, which are connected at one end to the upper sides of the bottom plates Y and Z of the dump-box B and made to run over the rollers *r r* and pulleys *p p* and to connect at their other ends with the posts X X, said posts being provided with suitable rings for that purpose. A suitable iron or wooden roller *r* is bolted upon the inside surface of each of the side plates D and E, as shown in the drawings.

*p p* designate sheaves or pulleys secured on the sides of the frame, as shown.

The chains P P, suitably attached at their forward ends to the posts X X, are intended to run back to the center of the box B and around the sheaves or pulleys *p p* through openings provided in the side plates D and E and over rollers *r r* to connect with the bottom plates Y and Z. The rod R is intended to be substituted in place of the ordi-

nary reach of the wagon, and its forward end is secured to the front wheels by a key-bolt passing up through the forward axle, rod, and cross-piece N and held in place by a suitable nut. The rearward end of this rod is suitably secured to the back axle.

The operation of our device is as follows: When both of the bottom plates lie in a horizontal position, the box may be filled with dirt in the ordinary manner. To dump the dirt from the right side, all the operator has to do is to put his foot on the brake on that side of the box and push outward. This disengages the brake from the ratchet-wheel. Then with a crank of the construction shown, the post on that side of the box is turned and the chain unwound. The weight of the dirt in the box causes the bottom plate on that side to drop downward, carrying the dirt with it. If it is desired to deposit the dirt from the left side, the operation of the left brake and post is similar. If the pitch obtained by dropping one plate is not sufficient to dump all the dirt from the box, the opposite brake and post may be operated, so as to tighten the chain on that side, and thus draw up the plate to which it is attached. This operation of loosening one plate and tightening or drawing up the other plate gives a very steep inclined pitch to both of the bottom plates, and all the dirt must necessarily be precipitated from the box. We claim the use of a chain or cable to connect the bottom plates with the posts.

It will be readily seen from this description that the dirt may be deposited from either side of the dump-box desired, and can be dumped over a bank or into a hole at once without any after-work of shoveling it into place. Moreover, by using our device no ridges of dirt are left to be driven over, as is the case in all other dumping devices.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of the box B, having inwardly-inclined sides and front and back sides extending downward beyond the side plates and forming a V-shaped termination provided with openings to receive the rod R, to which are hinge-jointed in a loose manner

the plates Y and Z, with the rollers *r r*, pulleys *p p*, chains P P, the posts X X, provided with the ratchet-wheels *c c*, said ratchet-wheels being adapted to be engaged by the brakes *b b* by means of springs *x* having bearing-arms *o o* for that purpose, and the frame A, all constructed as described, and for the purpose specified.

2. In a dirt-dumping device, the combination of the frame A, provided with posts X X, having ratchet-wheels *c c*, spring *x*, and brakes *b b*, with the box B, provided with bottom plates Y and Z, rod R, rollers *r r*, the pulleys *p p*, the chains P P, connected to plates Y and Z and adapted to run over said rollers and pulleys to connect with posts X X, and means for operating the chains to raise and lower the bottom plates Y and Z, all as set forth.

3. The combination, with the rectangular frame A, provided with foot-brakes *b b*, adapted to engage the ratchet-wheels *c c* on the posts X X, and a tongue, of the box B, the rollers *r r*, pulleys *p p*, and chains P P, having one of their respective ends attached to the posts X X and their other ends attached to the plates Y and Z, respectively, whereby the plates Y and Z may be raised or lowered, and a crank to operate the posts, all substantially as set forth, and for the purpose specified.

4. In a dirt-dumping device, the combination of the frame A, provided with the pulleys *p p*, brakes *b b*, spring *x*, and posts X X, with the box B, having the inner sides of its side plates provided with rollers *r r*, the plates Y and Z, hinge-jointed to the rod R, said rod being intended to take the place of an ordinary wagon-reach by being secured to the front and rear axles, the chains P P, connecting said bottom plates with said posts and adapted to operate in connection with said posts to raise and lower said bottom plates when desired, and a crank, all substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

GUSTAF A. STENBACK.  
JOHN ERICKSON.

Witnesses:

W. H. HOYT,  
GUY C. RICH.