

T. WEAVER.
Dumping-Wagon.

No. 167,715.

Patented Sept. 14, 1875.

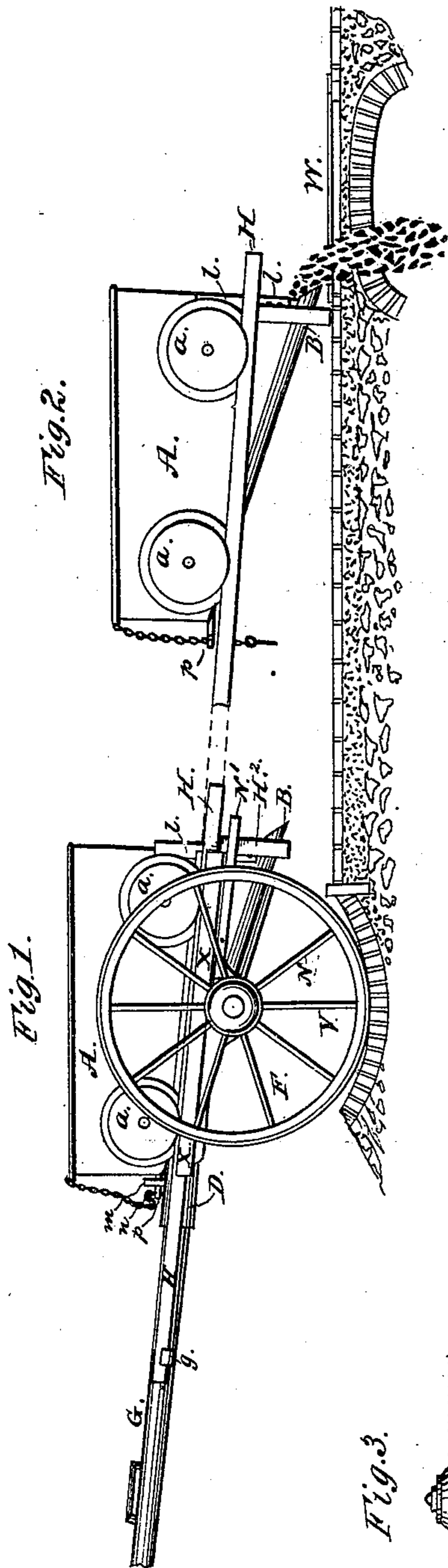


Fig. 2.

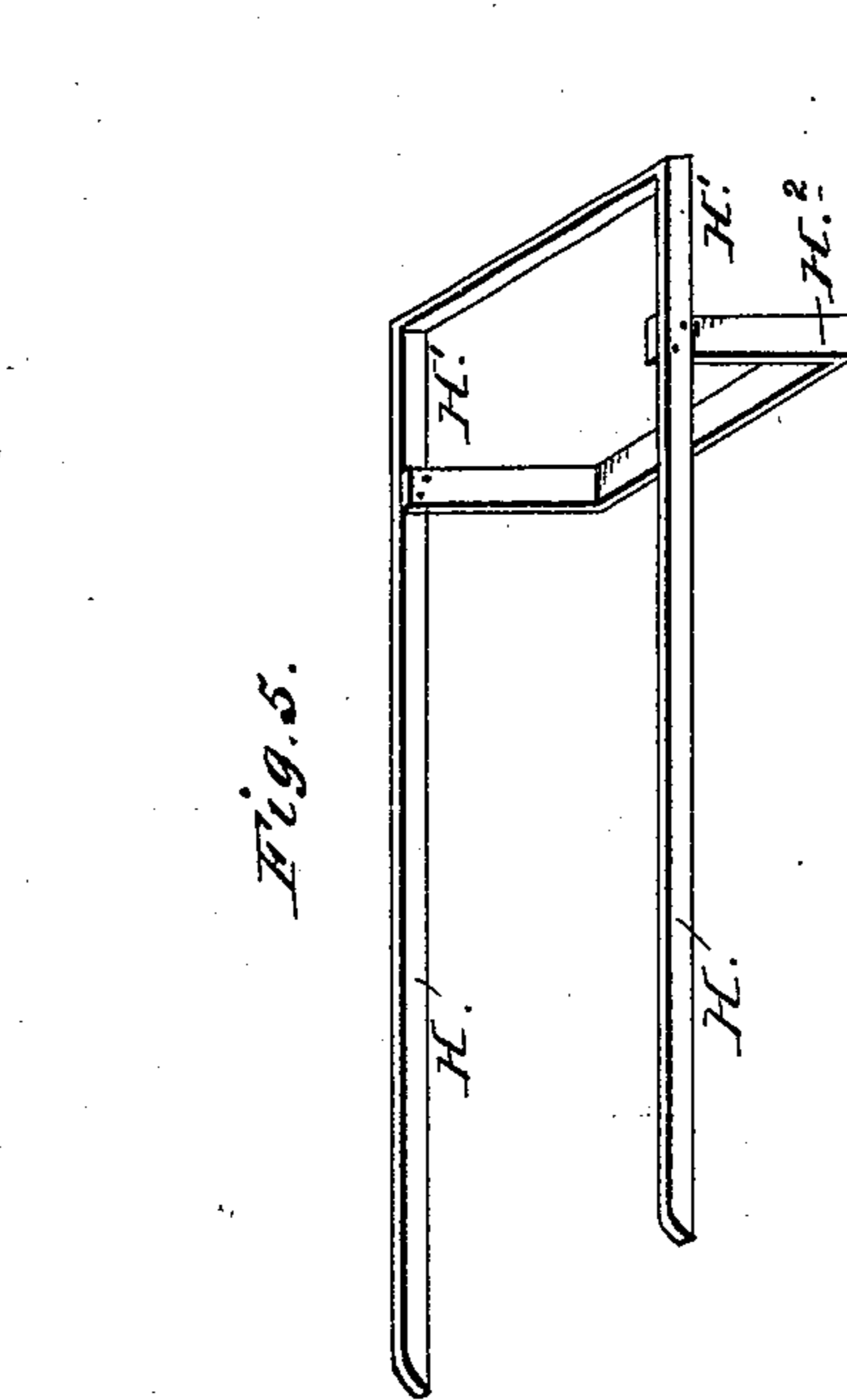


Fig. 5.

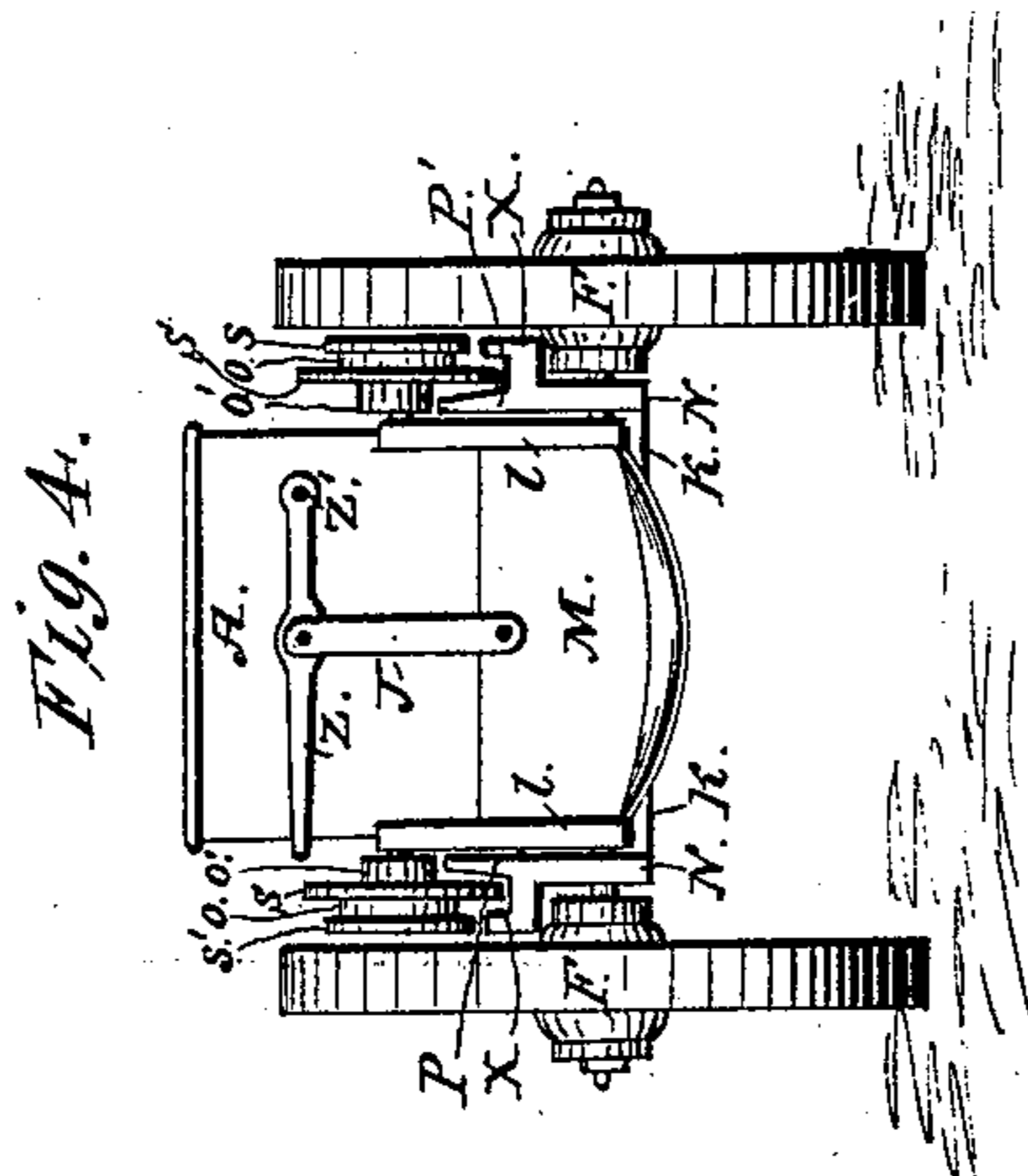


Fig. 4.

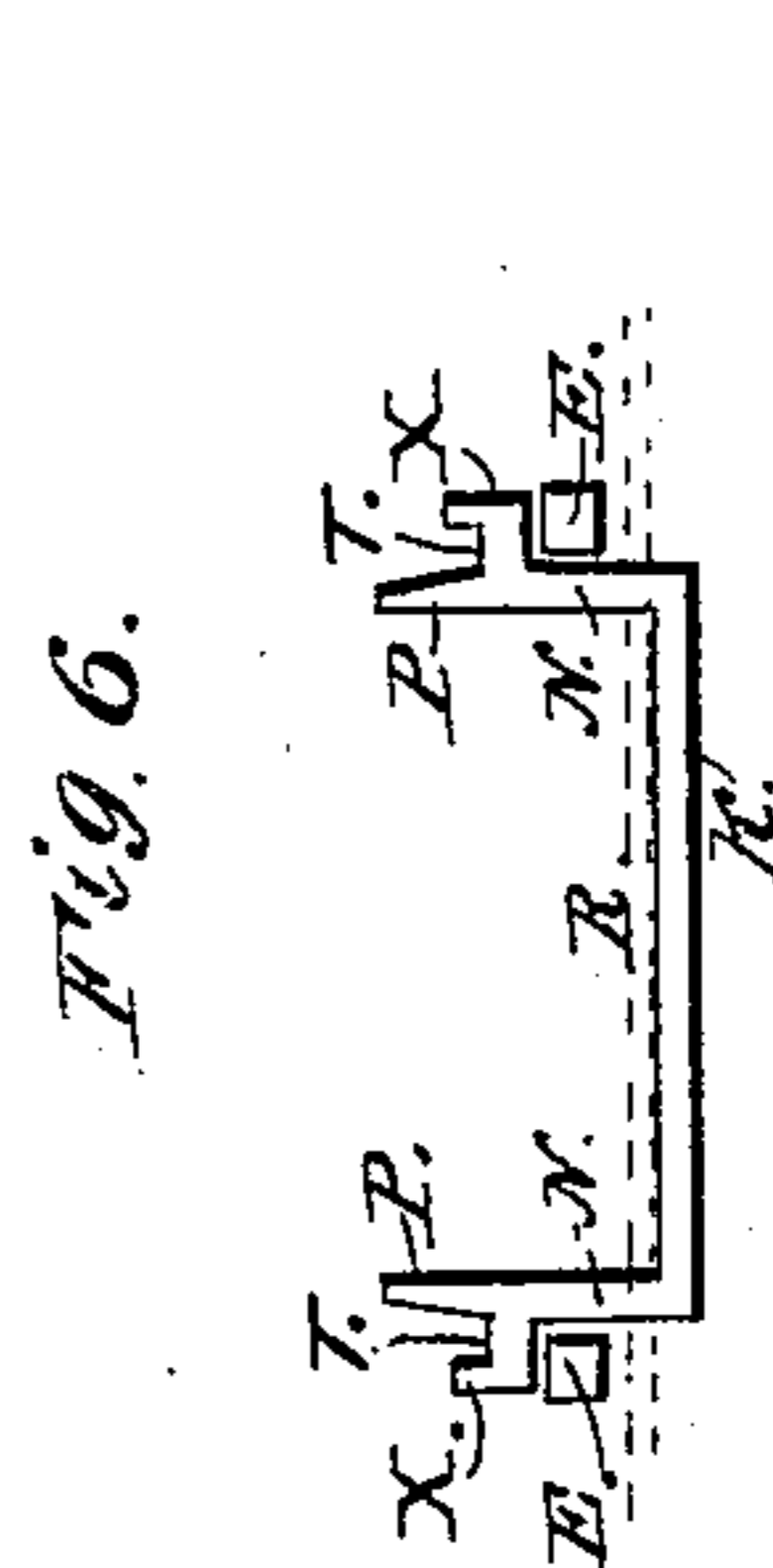


Fig. 6.

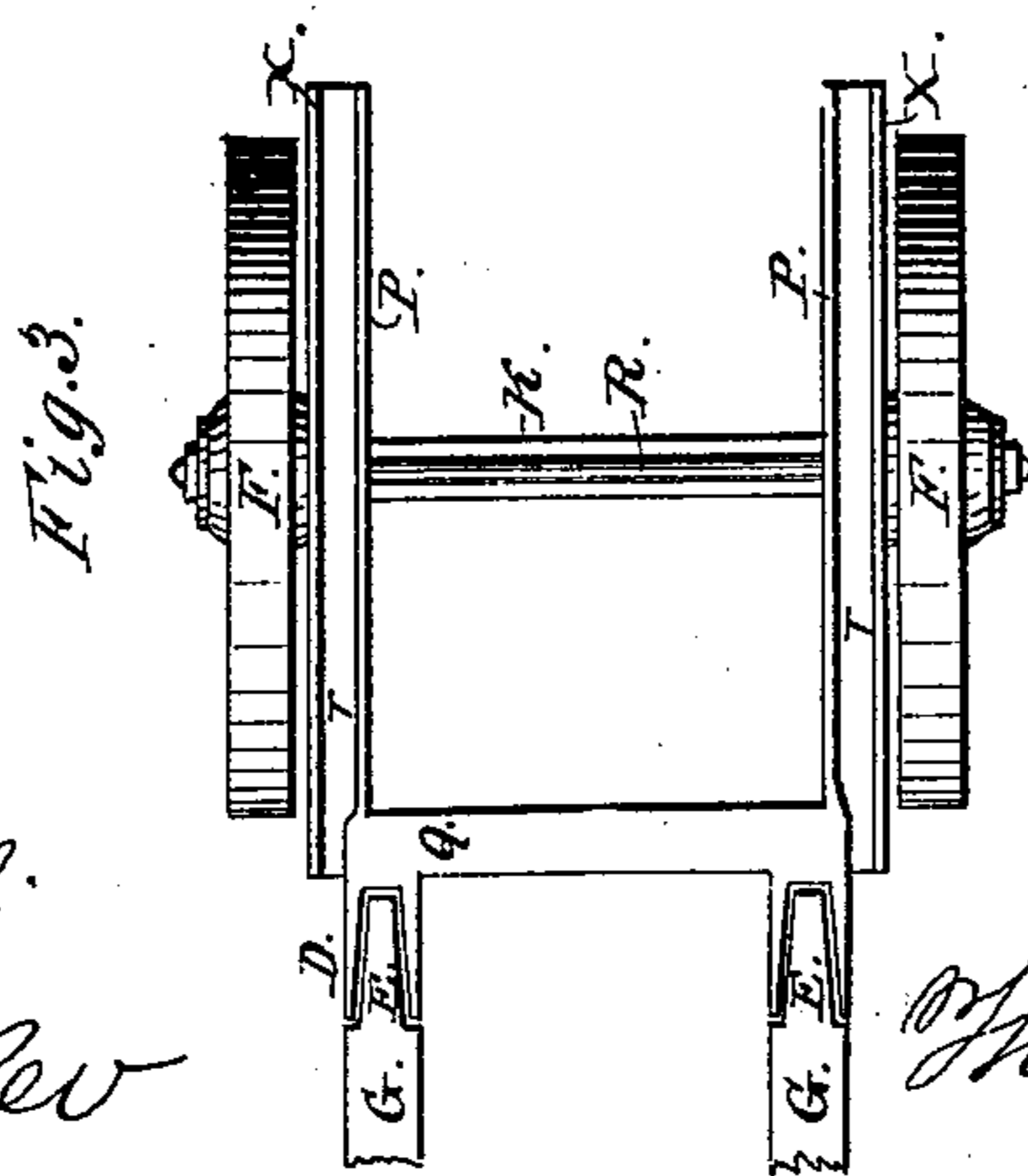


Fig. 3.

Witnesses:

George A. Saul.
Peter Struckev

Inventor:

Theophilus Weaver

UNITED STATES PATENT OFFICE.

THEOPHILUS WEAVER, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. **167,715**, dated September 14, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, THEOPHILUS WEAVER, of the city of Harrisburg, county of Dauphin and State of Pennsylvania, have invented an Improvement in Extension Railroad-Carts, of which the following is a specification, the accompanying drawings making a part thereof, in which—

Figure 1 represents the cart in condition for conveyance. Fig. 2 represents the switch-trestle, extended to the rear of the cart, (shown in Fig. 1,) and shows the bed moved to a suitable position to discharge its contents, as coal, for example, into a pavement vault-hole. Fig. 3 represents a top view of the truck. Fig. 4 represents a rear-end view of the cart, the switch-trestle being removed. Fig. 5 represents the switch-trestle. Fig. 6 represents a transverse sectional view of the truck taken through the axle.

Passing over the details, the main object of my invention is to unload coal properly without shoveling and without dumping, without extension-chutes, and without the aid of mechanical powers, into a wall-hole, cellar-way, or pavement-vault, with only momentary obstruction to passers-by, in a cleanly manner and with ease. Another object is to discharge earth or other matters safely to the horse down an embankment without a close approach by the cart to the brink. Another object is to produce a low cart, that it may be easily loaded, and that it may not carry top-heavy. Another object is to secure good construction, within the compass of the ordinary weight and cost of carts—all of which objects are fully realized by the plan involved in the following declarations of invention: First, a local track on the truck, adapted to sustain a trundle-bed thereon in a peculiar manner, and in loose connection therewith an extensible trestle-form switch, made to have a regular grade with the truck-rails, so that the bed may, when disengaged, be readily moved back and forth on the graded way solely by the hand, to discharge the load at any point desired. Second, combining the switch-rails into a rigid trestle or frame, and providing its extended end with a foot, by which it is upheld from the pavement or ground, to continue the grade of the truck-rails. Third, the truck-

platform, made open at the top and rear end thereof, to admit the body of the bed therein in a peculiar manner. Fourth, certain devices for retaining the switch-trestle in sheathed position on the truck when unemployed. Fifth, novel means to operate the tail-gate or division-gate.

In the description following, A represents the bed of the cart, designed to be made of sheet metal, having its bottom pitched rearward to form the outlet-chute B at its end. On the sides of the bed are affixed thereto the trundles *a a*, having the treads *o o'* and the flanges *s s'* on their peripheries, adapted to keep a double track, or to pass from the local truck-rails P P onto the lap-joints or switch-rails H H. The trundles *a a* are fastened to round bars which pass through the bed and stay its sides, and they are located properly on the sides of the bed to carry the bed's top level. Beneath the front end of the bed is joined thereto a tongue, *p*, of strap-iron, which is made to pass through the post *m* on the cross-head Q, and is retained therein by the pin *n*, which may be operated by a lever. This anchoring device holds the bed securely against upward and rearward displacement. The rear end of the bed has its lower section closed by the slide or tail gate M, which is operated in the vertical guides *l l*, and is operated by the lever Z, pivoted at Z', as shown in Fig. 4, and connected with the slide M by the link J, pivoted also, as shown. To deliver half-tons, the bed may be transversely partitioned by a similar slide, mounted and operated in a similar manner.

I construct the truck-platform, as shown in Figs. 1, 3, and 4, with parallel side frames, having the local rails P P thereon, and on the sides thereof the keepers T X, for the switch-rails N N, and having on their under sides the extensions or brackets N, by which the sides are mounted on and raised above the axle R sufficiently to align their tops or rails P P with the range of the thills G G. The side frames are connected at their front ends by the cross-head Q, and about their middle by the cross-tie K, arranged low down to afford an open space between the side frames, to admit between them the lower part of the bed A, and the side frames are not connected at their rear ends, to

allow the bed free exit onto the extension-way hereinafter described. The keepers T X of the side frames are made lower than the rails P P, that when the trundles *a a* are in position thereon ample space is left beneath them to shift the switch-rails H H loosely back and forth. On the head-block or cross-head Q are projected the extensions D D, in which the thills G G are inserted by the tenons E E, all arranged to allow the switch-rails H H to pass by the thills G G forward when sheathed, the staples or pockets *g* being affixed to the thills, as shown, to retain the ends of said rails to keep them from dangling while handling.

The extension switch-trestle is made with the switch-rails H H connected rigidly at their rear ends, and having thereunder the foot H², rigidly attached thereto, by which the extension-way is upheld at its rear end for two purposes: First, to allow the chute B to pass over the pavement unobstructedly to different points, where it may be desirable to discharge the contents of the bed; second, to align the rails H H that they may have about the same grade as the truck-rails P P, in order that the bed A may move easily and gradually to its destination, and that when unloaded it may be restored to its place on the truck by simply pushing it by the unassisted hand.

The cross-bar H¹ of the trestle may be omitted if the bar-ends of the foot H² are allowed to project above the rails H H, as those extensions will serve the purpose of the bar H¹, which is to stop the descent of the bed.

The rails H H are made to apply to the sides of the rails P P loosely, that they may be shifted readily back and forth, to set the foot H² at various distances from the cart-wheels, thus enabling the operator to deliver coal, for example, into pavement vault-holes, cellar-ways, or into openings in walls, and when this operation is over to quickly sheath the device into the truck, consuming less time than is usually spent in delivering coal, causing less detention to passers-by on the sidewalk, and leaving no residue of coal on the walk, as is now the case with dump-carts, or even with carts having folding chutes.

When the trestle is sheathed a spring-catch, N', attached to the sill N, holds the device securely on the truck, as shown in Fig. 1.

I do not limit my improvement to carts, as the build of wagons may be modified to apply my extension apparatus thereon. The front

bolster must be made higher than the rear wagon, and the axle of the latter must be a bent axle, having the crank down.

I am aware that local tracks on the truck-platform, also rollers under the bed, are old, being shown in the patent of Jason C. Osgood, September 28, 1839, on tilting wagons; also, that skid-rails, arranged behind the truck-rails, have been employed on lumber-wagons from time immemorial, the bed being conducted back and forth by windlass operation thereon, all of which, with slight modifications, is shown in the patent of J. Mills, September 1, 1874, on dumping-wagons, all of which arrangements are less advantageous than, and not in the field of, my extension-cart; therefore,

Having clearly and fully described my invention, and shown its status, what I regard as new and useful, and what I desire to secure by Letters Patent of the United States, is embraced in the following:

1. The local truck-rails P P, in combination with the extensible rails H H, when the latter are applied loosely as switches on the sides of the former, and arranged to have a common grade with them, that the bed A, provided with the trundles *a a*, may be moved back and forth thereon manually to various points on the graded way, for the purpose set forth.

2. The extensible switch structure, made with the rails H H rigidly combined with each other at their rear ends, and upheld thereat by the foot H², for the purposes set forth.

3. The truck-platform, composed of the side frames P N, the cross-head Q, and the cross-tie K, all constructed and arranged to admit the bed A into it and to allow it free exit to the rear, as set forth.

4. The switch-trestle H H², in combination with the staples *g* on the thills G G, to carry the device, and with the spring-catch N' to retain the device on the truck, as shown and described.

5. The slide M, the lever Z, and link J, in combination with a cart-bed, A, all arranged for operation as set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 22d day of July, 1875.

THEOPHILUS WEAVER.

Witnesses:

GEORGE A. SAUL,
PETER STUCKER.