2 Sheets—Sheet 1.

A. B. & T. C. DAVIS.

Dumping-Wagon.

No. 213,632. **Patented Mar. 25, 1879.**

Fig. 1.

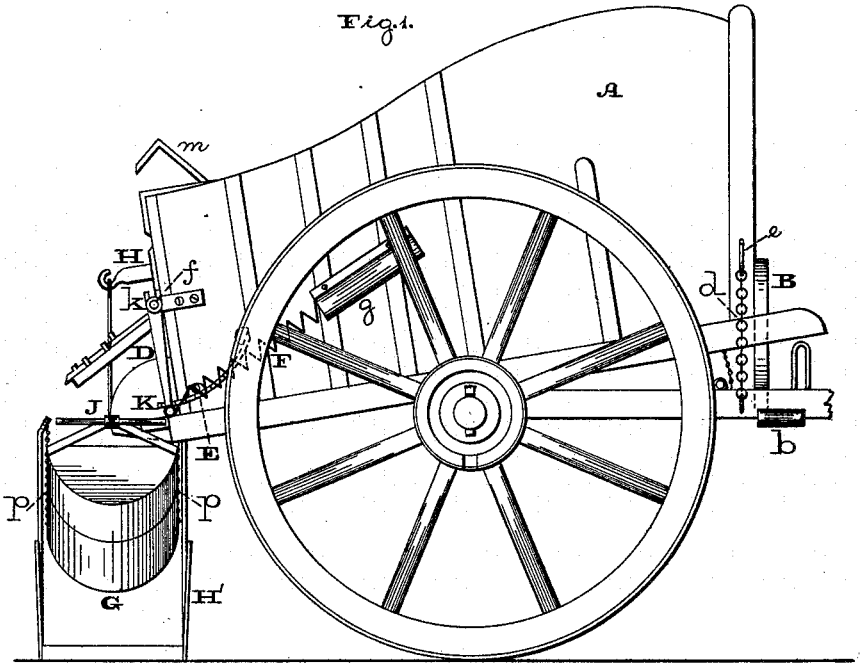
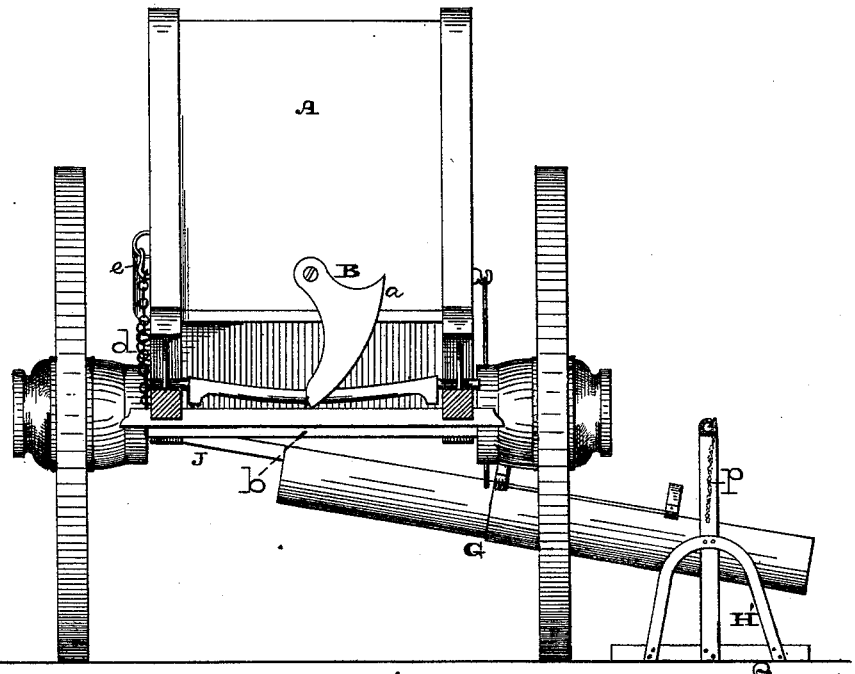


Fig. 2.



Witnesses:

M. P. Grant,

W. F. Fischer

Inventors:

A. B. Davis,

T. C. Davis,

by John A. Wiedersheim

ATTORNEY.

2 Sheets—Sheet 2.

A. B. & T. C. DAVIS.

Dumping-Wagon.

No. 213,632. Patented Mar. 25, 1879.

Fig. 3.

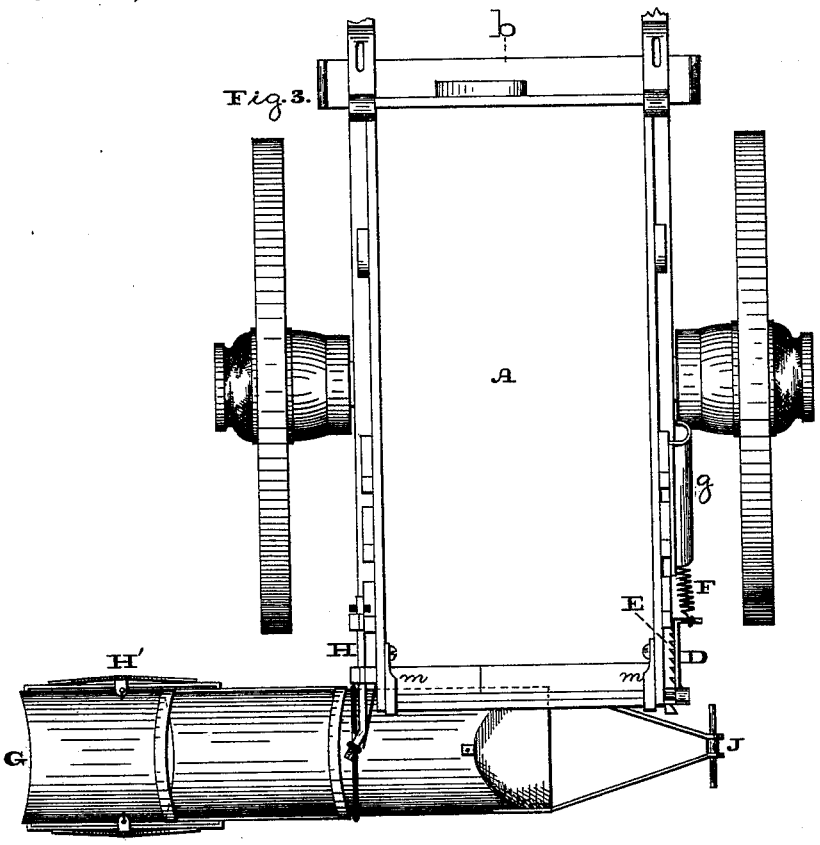
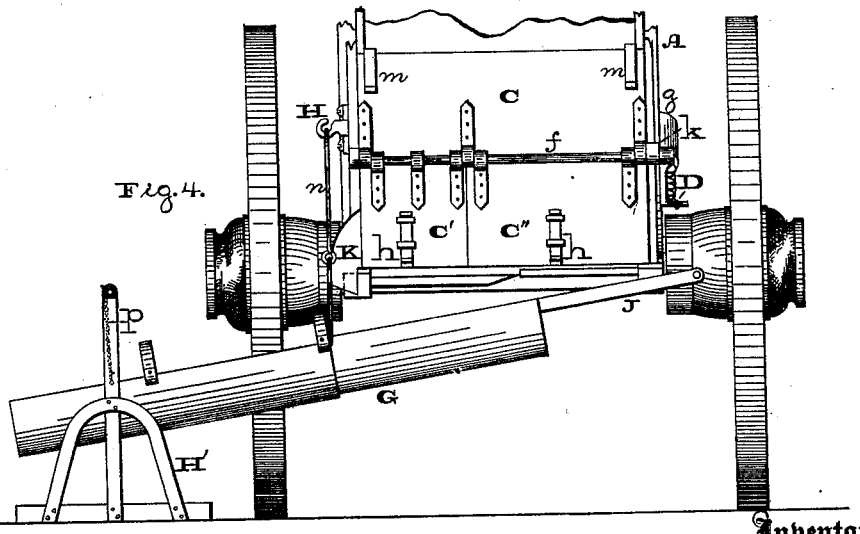


Fig. 4.



Witnesses:

A. P. Grant,

H. F. Kircher

Inventors:

A. B. Davis,

T. C. Davis,

by John A. Wedderburn

ATTORNEY.

UNITED STATES PATENT OFFICE.

AUGUSTUS B. DAVIS AND THOMAS C. DAVIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS OF ONE-THIRD THEIR RIGHT TO WILLIAM B. KINSEY, OF SAME PLACE.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. **213,632**, dated March 25, 1879; application filed July 12, 1878.

To all whom it may concern:

Be it known that we, AUGUSTUS B. DAVIS and THOMAS C. DAVIS, both of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Dumping and Conveying Coal, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the apparatus embodying our invention. Fig. 2 is a front view thereof. Fig. 3 is a top or plan view thereof. Fig. 4 is a rear view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

Our invention relates to dumping-wagons; and consists in certain details of construction, which will hereinafter be more fully described, and pointed out in the claims.

Referring to the drawings, A represents the body of a cart or other vehicle, which is mounted on two or more wheels, and adapted to be tilted similar to coal-carts at present in use. To the front end of the body there is pivoted a prop, B, having a cam-face, *a*, which is adapted to bear against the connecting-bar *b* of the shafts; and to the latter there is connected a chain, *d*, whose links engage with a hook or pin, *e*, on the body A.

It will be seen that when the body A is tilted to the required extent the relative portion of the face *a* of the prop rests on the bar *b*, and prevents the return of the body to its lowermost or normal position, and the chain *d*, being properly attached to the hook or pin *e*, prevents further tilting of the body.

C represents the tail-board, which is formed of sections having a horizontal hinged joint, each section, if desired, being constructed of two or more doors, C′ C″.

The part C′ is firmly secured to the axial or hinge rod *f* of the tail-board, to one end of which is attached an arm, D, which engages with a segmental rack, E, connected to the side of the body A. To the arm D there is connected a spring, F, which may be inclosed in a cap or casing, *g*, fixed to the body A.

The doors C′ C″ of the tail-board will be provided with bolts *h h*, which engage with the floor of the body for locking said doors; and the ends of the axial or hinge rod *f* are fitted on open eyes *k*, so that the entire tail-board may be removed. Prior to such removal, however, the spring F will be disconnected from the arm D.

When the tail-board is in position it will be held from displacement or folding by means of hooks or catches *m m*, suitably pivoted to the sides of the body A.

It will be noticed that when the body is tilted, as in Fig. 1, the coal may be removed, to accomplish which the arm D is turned until the door C′ is opened to the required extent, thus forming a throat, through which the coal will flow or be discharged, said flow being regulated by the driver or other party manipulating the arm D, to increase or decrease the extent of the throat or opening, as occasion requires.

In some cases both doors C′ C″ may be opened to discharge the load.

When the body A is to be loaded it may be accomplished from the rear by raising the doors C′ C″ or lowering the upper section of the tail-board. The convenience and advantages are evident; but, if desired, the entire tail-board may be removed by lifting it from the supporting-eyes *k*, as has been stated.

G represents a chute or conveyer for directing the coal, as it leaves the body A, to the cellar door or window, vault-opening, or other desired place of storage of the coal. This chute is formed of parts or sections, which permit it to be lengthened and shortened according to requirement, and it is freely suspended, by means of rods or chains *n* or other devices, from a crane or arm, H, attached to the body A, or from another suitable support, whereby oscillations or shaking may be imparted to the chute.

In order to support the outer or lower end of the chute we connect to it rods or chains *p*, whose upper ends are secured to a stand, H′, which may be moved or shifted for placing the outer or lower end of the chute in the desired locality.

The upper or inner end of the chute is formed with a handle, J, which will be of such length

and construction that while the driver or other person operates with one hand the arm D, which regulates the flow of the coal from the body A into the chute, his other arm will be shaking the coal in said chute, so as to cause it to be freely discharged therefrom.

The chute and stand may be carried on the load of coal to the desired locality and readily set in operation, and when the work is accomplished it may be conveniently returned in the empty body.

The crane H is supported on eyes attached to the body A, and adapted to slide therein, so as to be moved in or drawn out, as occasion requires.

To the corner of the body A, adjacent to the door C′, there is secured a guard, K, which projects longitudinally therefrom, and serves to prevent loss or dropping of coal laterally from the corner, which feature is especiallly serviceable, as when the wheel or wheels of one side of the vehicle rest in the gutter of the street the tendency of the coal is to fall laterally from the throat formed by the open door C′.

In lieu of the chain *d* at the front of the body A, we may use a slotted bar or other device for holding said body or limiting the extent of tilting thereof.

If desired, the chute may be mounted on rollers or pulleys fixed to the stand H′, or resting on the pavement or ground.

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

1. The cam-prop B, pivoted to the front end of the body A, in combination with the cross-bar *b*, chain *d*, and hook *e*, whereby the front end of the body can be raised and lowered, as desired, and held securely in any position, substantially as described.

2. The tail-board described, formed of the sections C C′ C″, hinged together by the rod *f*, having its bearings in the open supporting-eyes *k*, whereby each or all the sections can be opened or closed, as desired, or the entire tail-board be removed or inserted, substantially as described.

3. The swinging door C′, in combination with the rod *f*, provided with the crank-arm D, rack E, and spring F, substantially as described, and for the purpose set forth.

4. The combination of the body A, provided with a corner-guard, K, with the swinging corner door, C′, and mechanism for opening said door, substantially as described, and for the purpose set forth.

5. The coal-chute G, suspended freely from the body A and from a stand, and capable of having an oscillating motion imparted to it, substantially as described, and for the purpose set forth.

6. The combination of body A, oscillating chute G, having handle J, and supporting-stand H′, substantially as described, and for the purpose set forth.

7. The chute G, in combination with the suspending-crane H and supporting-stand H′, substantially as and for the purpose set forth.

A. B. DAVIS.
THOS. C. DAVIS.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. RUTHERFORD.