

(No Model.)

2 Sheets—Sheet 1.

E. GABEL.
DUMPING WAGON.

No. 496,932.

Patented May 9, 1893.

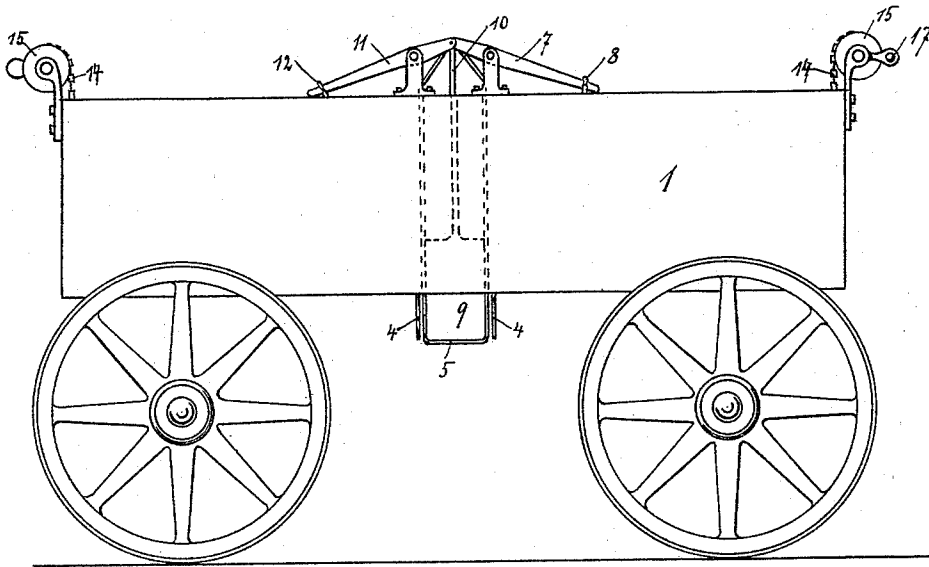


Fig. 1.

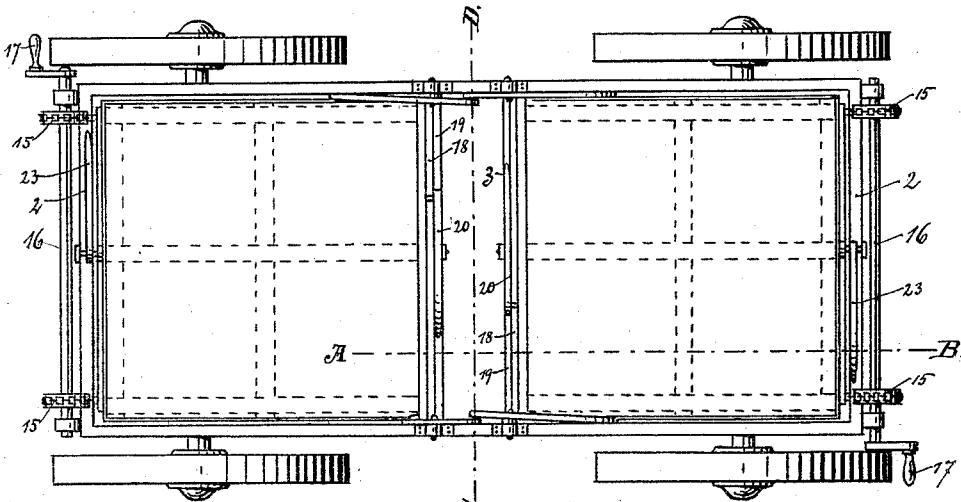


Fig. 2.

WITNESSES.

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2 Sheets—Sheet 2.

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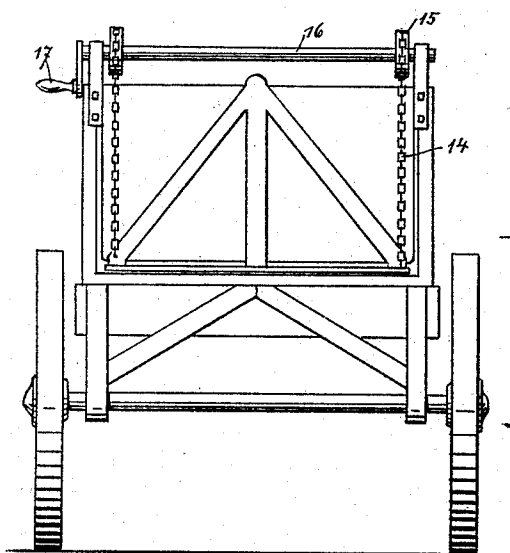


Fig. 3.

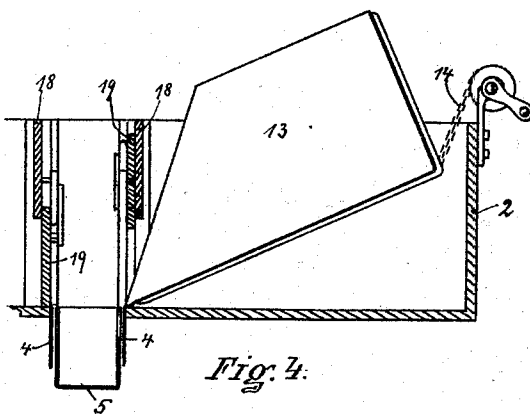


Fig. 4.

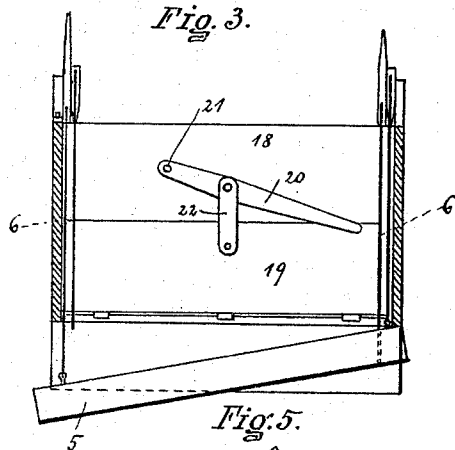


Fig. 5.

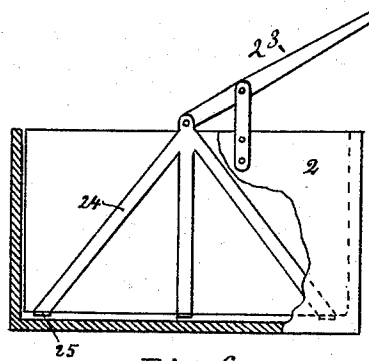


Fig. 6.

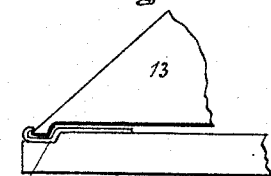


Fig. 7.

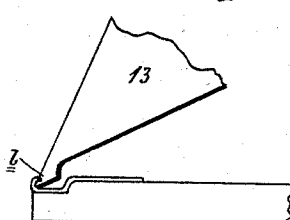


Fig. 8.

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UNITED STATES PATENT OFFICE.

EDWARD GABEL, OF DEERFIELD, NEW YORK.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 496,932, dated May 9, 1893.

Application filed February 20, 1893. Serial No. 462,965. (No model.)

To all whom it may concern:

Be it known that I, EDWARD GABEL, of Deerfield, in the county of Oneida and State of New York, have invented certain new and useful
5 Improvements in Dumping-Wagons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings,
10 and to the figures of reference marked thereon, which form part of this specification.

My invention relates to an improvement in dumping wagon boxes, more particularly intended for handling coal.

In the drawings which accompany and form a part of this specification and in which similar numerals of reference refer to corresponding parts in the several views, Figure 1 shows
20 a side elevation of my improved wagon box. Fig. 2 shows a plan view of the same. Fig. 3 shows a rear end view with the rear end board removed. Fig. 4 shows a longitudinal section on line A—B of Fig. 2. Fig. 5 shows a transverse section on line C—D of Fig. 2. Fig. 6
25 shows an end view of the box in connection with a modified form of mechanism for dumping the scoops. Figs. 7 and 8 show details of the hinged connection at the edge of the
30 scoop.

Referring more particularly to the reference numerals, the box consists of side pieces 1—1 and end pieces 2—2 secured together forming a rigid box. The box may be further strengthened by the addition of cleats and stringers
35 as is common in the construction of certain classes of wagon boxes. Transversely across the middle of the box and extending the entire width is an opening 3. The opening 3 is
40 provided on each side with an apron 4—4. Between the aprons is mounted a delivery chute 5 with vertical walls narrower than the aprons 4 and suspended at each end by hangers 6 extending to levers 7 upon the upper
45 edge of the box. The lever is provided with a keeper 8. Similar devices are provided on each side of the wagon box.

Within the open space 3 in the wagon box and adapted to be dropped into the end of the chute 5 is provided a gate 9, shown in dotted lines in Fig. 1, which gate is attached by means
50 of rod 10 to lever handle 11, pivoted to a ful-

crum piece upon the upper edge of the box, and provided with a keeper 12 by means of which it can be secured and held in upper position. 55
At either side of the opening 3 in the bottom of the box are hinged the coal scoops 13—13. The hinge employed is preferably of the form shown in Figs. 7 and 8, in which an offset hook
60 *a* is secured on the bottom, and the scoop is provided with an offset end *b* adapted to lock its shoulder with the shoulder on the hook when the scoop is in its lower position, or having its bottom lying parallel with the bottom
65 of the wagon box, thus preventing displacement of the scoop, but allowing it to be removed. When it is elevated into the position shown in Fig. 8, the scoop is provided with
70 bottom, side and end walls, as shown, and as shown in Figs. 1 to 4 inclusive has attached to its bottom edge a chain or flexible connection 14 extending to rollers 15 mounted upon
a shaft 16 journaled in bearings at the upper edge of the box. The shaft 16 is provided
75 with a crank handle 17 and suitable pawls may be provided for securing the shaft with the scoop elevated if desired. At each side of the opening 3 in the bottom of the box and at the open ends of the scoops 13 is provided
80 a two part partition composed of stationary parts 18 and movable part 19. For the purpose of moving the part 19 there is provided a lever handle 20 pivoted to the part 18 at 21 and provided with a connection rod 22 extending to and connected with the part 19. 85

In the form of construction shown in Fig. 6 the shaft 16 and connecting parts are dispensed with, and in lieu thereof is provided a simple lever 23 pivoted to a piece secured to the edge of the box and connected with
90 brace-like hangers 24 which extend down and are hinged at 25 to the bottom of the coal holding scoop.

The operation of the device is substantially as follows: With the bottoms of the scoops 95 resting on the bottom of the box, the coal is filled into the wagon box, filling each of the scoops 13. At this time the movable portions 19 of the partitions at either side of the opening 3 are closed, which prevents the coal or
100 contents from escaping into the opening 3. When the wagon is brought to the place of delivery, the delivery chute is dropped at one end by operating the lever 7 on one or the

other side of the wagon according to the side on which it is desired to have the coal delivered. It will be observed that in this position, the end of the scoop that has been lowered is lowered into a position where the upper edge of the walls of the chute substantially register with the lower edge of the aprons 4 while the opposite end of the chute is held close up to the bottom of the wagon with the upper edge of the chute just below the edge of the scoops; this gives a pitch to the chute 5 down which the coal will move by its own gravity. If it is desired to deliver the coal in a continuous stream from the chute 5, the movable portion 19 of the partition is raised by means of lever handle 20 which allows the coal to escape into the chute 5. And in case it is desired to control the flow, as in the filling of baskets, the gate 9 may then be brought into operation by means of handle lever 11. When all of the coal that will run out of the scoop by its own gravity has escaped through the opening 3 in the bottom of the box the scoop 13 is then elevated at its swinging end by means of the crank 17 and connections, substantially into the position shown in Fig. 4; in which case all of the coal will run into the chute 5 and be delivered therefrom. In case the device shown in Fig. 6 is used for elevating the scoop, the operation of discharging the coal is the same. It is preferable to discharge one scoop at a time, and not from both scoops simultaneously.

It is evident that numerous alterations and changes in and from the construction described may be made without departing from the equivalents of my construction.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a dumping wagon box having a middle transverse opening, of two dump scoops contained in the box and hinged in the box and at the edge of the middle opening, combined substantially as set forth.

2. In a dumping wagon box having a transverse middle opening in the bottom, a pair of dumping scoops having their open ends adjacent to the middle opening in the bottom, movable partitions in the box at either side of the opening and mechanism for dumping the scoops, combined substantially as set forth.

3. In a dumping wagon box having a transverse opening in its bottom, of aprons extending downward at either side of the opening, and a delivery chute hung upon movable hangers between the aprons and adapted to be lowered at either end, combined substantially as set forth.

4. In a dumping wagon box, a middle opening, a two part partition at the opening having the upper part fixed and the lower part movable, and a lever pivoted on the fixed part and connected with the movable part, combined substantially as set forth.

5. In a dumping wagon box a middle transverse opening, a pair of dumping scoops hinged at each side of the opening, mechanism for dumping the scoops, an apron at each side of the opening, a delivery chute between the aprons, hangers for each end of the chute and gates in each end of the chute, combined substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

EDWARD GABEL.

Witnesses:

J. G. GIBSON,
M. A. KELLER.