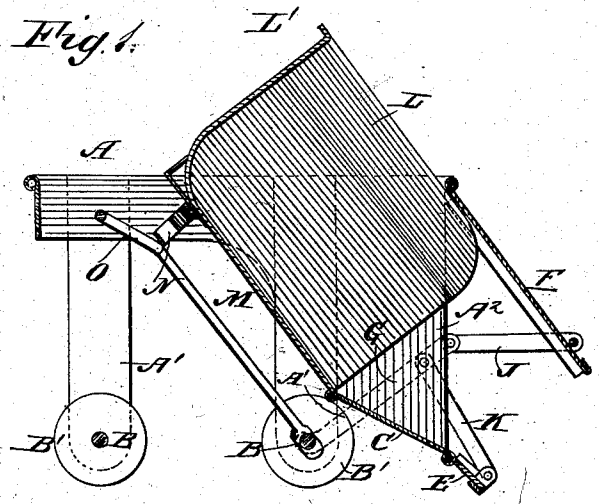
(No Model.)

T. WALLWORK.

COAL DUMPER.

No. 296,089. Patented Apr. 1, 1884.

Fig. 1.



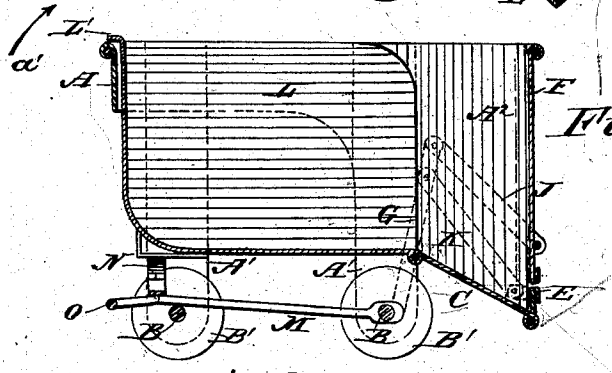
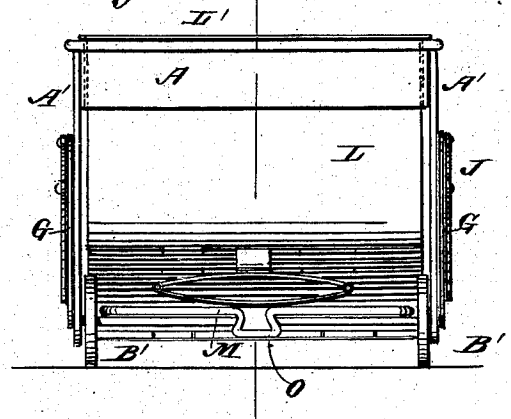


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS WALLWORK, OF LITCHFIELD, ILLINOIS.

COAL-DUMPER.

SPECIFICATION forming part of Letters Patent No. 296,089, dated April 1, 1884.

Application filed January 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WALLWORK, of Litchfield, in the county of Montgomery and State of Illinois, have invented a new and Improved Coal-Dumper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved receptacle for coals or other articles, which receptacle or car is so constructed that when it is dumped its gates open automatically.

The invention consists in the combination, with a frame, of a box hinged in the same at one end of the bottom of the said box, which frame is provided at one end with gates hinged to the top and bottom of the same, which gates are connected in such a manner that they open and close together.

The invention also consists in a frame for swinging the box upward, and in various other parts and details, as will be fully set forth and described hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved coal-dumper, showing it raised and the gates opened. Fig. 2 is a longitudinal sectional elevation of the same, showing it lowered and the gates closed. Fig. 3 is a rear end elevation of the same.

A frame or cage, A, is supported by four standards, A′, in the lower ends of which axles B are journaled, on which wheels B′ are mounted. The frame has sides extending down to the lower ends of the standards in front of the front standards, A′, as shown at A^2. The frame A is provided with an outwardly and downwardly inclined bottom, C, in front of the front standards, A′, and to the lower edge of the said inclined bottom an outwardly-swinging gate, E, is hinged. An outwardly-swinging gate, F, is hinged to the top of the front of the frame A, the free edges of the gates E and F being in contact when both are closed. Arms G, projecting upward, are hung at the bottom ends on the outer ends of the front axle, and to the upper ends of the arms G connecting-rods J are pivoted, which are pivoted to the ends of the upper gate, F, at the free edge. At a short distance from the free ends of the arms G connecting-rods K are pivoted, which have their outer ends pivoted to the ends of the bottom gate, E, at the free edge, so that if the upper ends of the arms G are moving downward and outward, the gate F will swing upward and outward, and the gate E will be swung outward and downward. A box, L, fitting in the frame A, has the front edge of its bottom hinged to the upper rear edge of the inclined bottom C, so that the rear end of the box L can swing upward and toward the front of the frame A. A frame, M, is hung on the front axle of the frame A, and on its rear swinging end a bow-spring, N, is secured, on which the rear end of the box L rests.

The operation is as follows: If the frame is lowered, the lug or projection O, which is formed on the swinging end of the frame M, strikes a projection provided for this purpose a short time before the frame A rests on rails or other support, and thereby the frame M will be swung upward, and will swing the box L upward in the direction of the arrow *a′*. The front upper corners of the box L strike the gate F and swing it open, thereby swinging the arms G downward, and thus causing the connecting-rods K to swing the gate E downward, the said gate E forming an apron down which the coals, &c., can slide. If the frame A is raised, the box L swings down by its own weight and closes the gates E and F.

The above-described dumper can be used for grain, sand, and other articles as well as for coal.

If desired, a bail can be secured on the rear end of the box L, for the purpose of raising the said box.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a coal-dumper, the combination, with a frame, of a swinging box hinged in the same, and of gates hinged to the top and bottom of the frame, the said gates being connected to open and close together, substantially as herein shown and described.

2. In a coal-dumper, the combination, with a frame having an inclined bottom at its front,

of a box hinged in the frame, and of gates hinged to the top and bottom of the front end of the frame, the said gates being connected to open and close together, substantially as herein shown and described.

3. The combination, with a frame, of a box hinged in the same at one end of the bottom of said box, substantially as herein shown and described.

4. The combination, with the frame A, of the box L, hinged in the same at one end of the bottom of the said box, and of the frame M, hinged in the frame A, under the box L, substantially as herein shown and described.

5. The combination, with the frame A, of the box L, hinged in the same at one end of the bottom of the said box L, the frame M, hinged on the frame A, under the box L, and of the spring N on the frame M, substantially as herein shown and described.

6. The combination, with the frame A, of the hinged box L, the gates F and E, hinged to the top and bottom of the ends of the frame A, the swinging arms G, and the connecting-rods J K, extending from the arms G to the gates F and E, substantially as herein shown and described.

7. The combination, with the frame A, having the sides A^2 at the front, and an inclined bottom, C, between the sides A^2, of the hinged box L, the gates F and E, hinged to the top and bottom of the frame A, the swinging arms G, and the connecting-rods J and K, extending from the arm G to the gates F and E, substantially as herein shown and described.

THOMAS his × mark. WALLWORK.

Witnesses:
JAMES GREENHALGH,
WILLIAM GREENHALGH.