No. 840,038. PATENTED JAN. 1, 1907.

W. L. BASKINS.

LOCOMOTIVE TENDER.

APPLICATION FILED MAR. 15, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

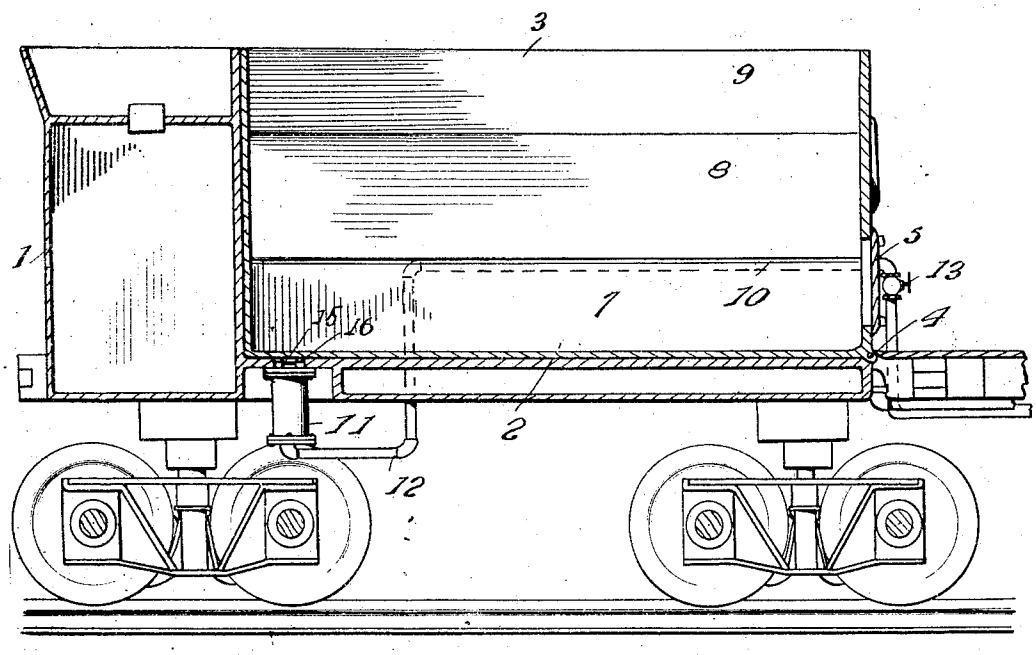
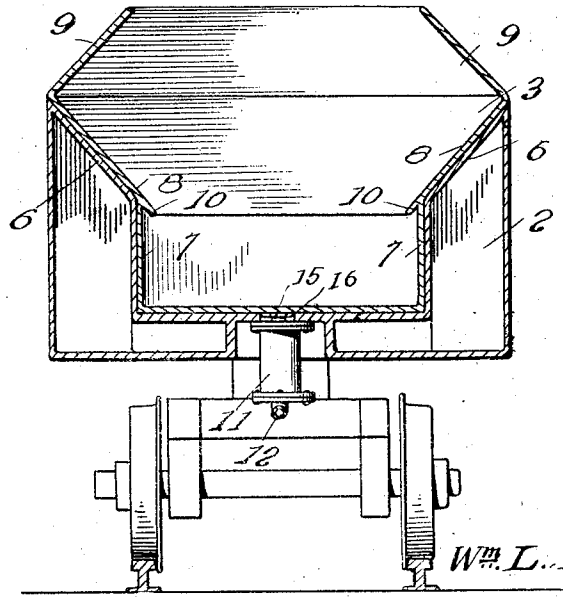


Fig. 2.



Inventor

Wm. L. Baskins

Witnesses

H. N. Woodson.

By Rhodes Lacey, Attorneys

No. 840,038. PATENTED JAN. 1, 1907.

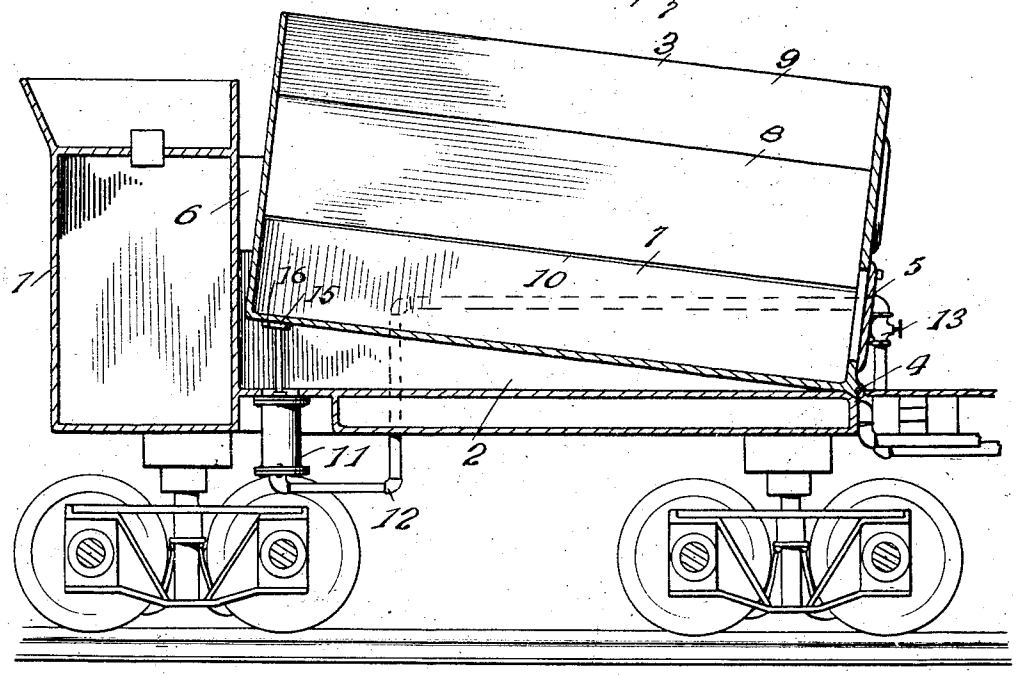
W. L. BASKINS.

LOCOMOTIVE TENDER.

APPLICATION FILED MAR. 15, 1906.

2 SHEETS—SHEET 2.

Fig. 3.



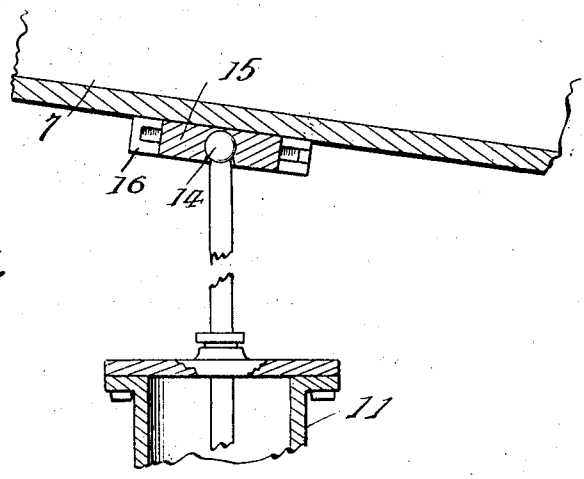


Fig. 4.

Witnesses

Inventor

Wm. L. Baskins

By Thos. B. Lacey, Attorney

UNITED STATES PATENT OFFICE.

WILLIAM L. BASKINS, OF ALLIANCE, NEBRASKA.

LOCOMOTIVE-TENDER.

No. 840,038. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed March 15, 1906. Serial No. 306,275.

To all whom it may concern:

Be it known that I, WILLIAM L. BASKINS, a citizen of the United States, residing at Alliance, in the county of Boxbutte and State of Nebraska, have invented certain new and useful Improvements in Locomotive-Tenders, of which the following is a specification.

This invention relates in general to a tender for locomotives, and more particularly to an improved method of constructing the coal-bin, whereby the coal can be mechanically fed toward the forward end of the tender, where it is readily accessible for feeding the fires under the engine.

The invention consists, essentially, in the formation of the coal-bin with a movable bottom, means being provided whereby the bottom can be tilted so as to form an inclined plane, which throws the coal toward the forward end of the bin. This construction would obviate the necessity of taking on coal at every coal-station and would also render it unnecessary for the fireman or brakeman to pull the coal down within the tender.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a ongitudinal sectional view through a tender constructed in accordance with the invention, showing the coal-bin as lowered and in normal position. Fig. 2 is a transverse sectional view through the same. Fig. 3 is a view similar to Fig. 1, showing the rear end of the coal-bin in an elevated position; and Fig. 4 is a longitudinal sectional view through the cylinder, showing the method of connecting the piston-rod to the coal-bin.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The invention is shown as applied to a tender similar to those in common use in which the rear portion 1 is occupied by the water-tank, while the forward portion 2 receives the coal-bin 3. This coal-bin 3 is constructed separate from the tender, so as to fit within the forward end thereof, and is hinged to the bottom of the tender at 4, so that the rear portion can be swung upwardly and the bottom of the bin thereby tilted so as to form a chute which will deliver the coal toward the front of the bin, where it can be readily removed through the coal-gate 5. The sides of that portion of the tender within which the coal-bin 3 rests have their upper portions beveled at 6, and the sides 7 of the coal-bin have their upper portions flared outwardly at 8 and then inwardly at 9, the outwardly-flared portions 8 resting upon the beveled edges 6 of the sides of the tender. It may also be found desirable to extend the outwardly-flared portions 8 of the sides of the bin somewhat inwardly, as seen at 10, thereby forming inclined planes which will deliver the coal from the sides of the bin toward the center thereof. It will thus be seen that by flaring the upper portion of the bin the double object is accomplished of greatly increasing the capacity thereof and of so forming the bin that the coal will be delivered toward the center thereof, where it can be readily brought down to the coal-gate 5 by tilting the bin.

In order to elevate the rear end of the bin 3, an upright cylinder 11 is located beneath the tender and is provided with a piston, the piston-rod of which passes through the bottom of the tender and is connected to a block 15 by the ball-and-socket joint 14, the said block being slidably mounted between two guide members 16, secured to the bottom of the bin. This sliding connection serves to compensate for the longitudinal movement of the parts when the bottom of the coal-bin is tilted. This cylinder 11 may be operated in any suitable manner, but is preferably connected to the locomotive-boiler by means of a steam-pipe 12, provided with a suitable valve 13. It will thus be apparent that by opening the valve and allowing the steam to enter the cylinder 11 the rear end of the coal-bin 3 will be forced upwardly and the contents thereof delivered toward the forward end.

Having thus described the invention, what is claimed as new is—

1. The combination of a tender provided with a coal-bin, a movable bottom for the coal-bin, a rod bearing against one end of the movable bottom so as to tilt the same and form an inclined plane, the said rod having a slidable connection with the movable bottom, and means for operating the rod.

2. The combination of a tender, the opposite sides of which are beveled, a movable coal-bin fitting within the tender and provided with oppositely-disposed sides, the

lower portions of which are approximately vertical, while the upper portions are flared outwardly and adapted to rest upon the beveled edges of the sides of the tender, extensions projecting inwardly from the flared portions of the sides and extending somewhat beyond the lower vertical portions of the sides, the said extensions forming inclined planes for throwing the coal away from the sides of the bin and toward the center thereof, and means for tilting the bin to form an inclined plane for the delivery of the coal toward the lower end thereof.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. BASKINS. [L. S.]

Witnesses:
H. E. BAILEY,
J. R. BASKINS.