W. HEINIG.

ENGINE TENDER.

APPLICATION FILED JAN. 12, 1912.

1,044,045. Patented Nov. 12, 1912.

Fig. 1.

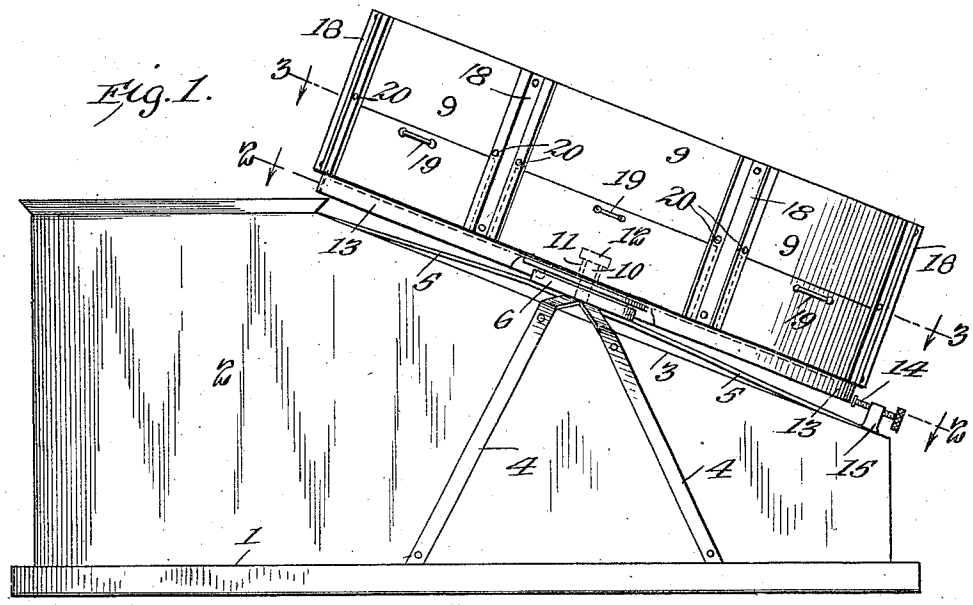


Fig. 2.

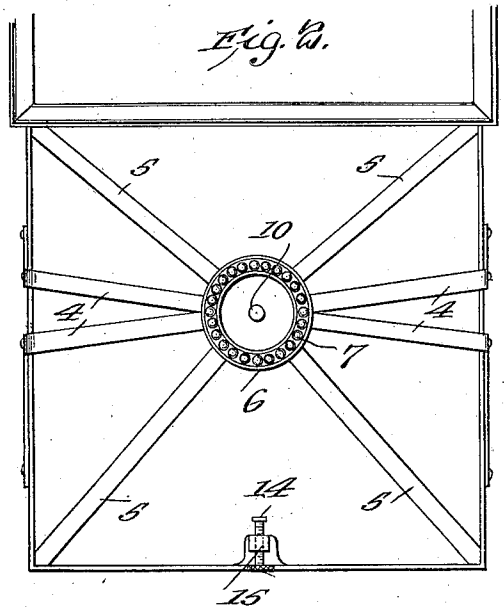


Fig. 3.

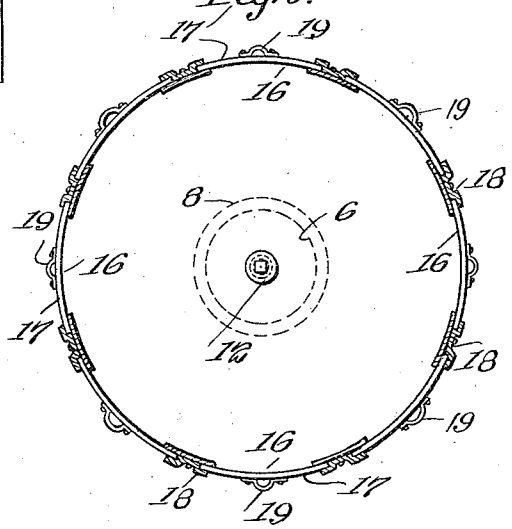
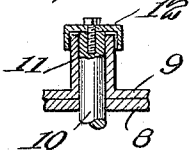


Fig. 4.



Witnesses

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ENGINE-TENDER.

1,044,045. Specification of Letters Patent. Patented Nov. 12, 1912.

Application filed January 12, 1912. Serial No. 670,819.

To all whom it may concern:

Be it known that I, WILLIAM HEINIG, a citizen of the United States, residing at Fitchburg, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Engine-Tenders, of which the following is a specification.

This invention relates to engine tenders and the object of the invention is to provide means thereon which will obviate the usual difficulty encountered by the fireman of having to handle his coal twice.

A further object of the invention is the provision of a coal receptacle or pocket which automatically operates when released to bring the portion thereof having the greatest amount of coal adjacent the engine so that the fireman does not have to handle the coal a second time to get the same into the fire box.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a side elevation. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a similar section taken on the line 3—3 of Fig. 1. Fig. 4 is a detail sectional view through the center of the receptacle.

Referring more particularly to the drawing, 1 represents an ordinary tender having a water tank 2 mounted thereon provided with an inclined top 3. Bridged across the top and separated therefrom are bracing bars 4 which extend down along side of the tank and are connected in their center by diagonal braces 5 which extend from the corners of the inclined top toward the center thereof. Mounted upon the bars 4 and 5 at the junction thereof is a bearing plate 6 having a ball or raceway formed therein adapted to receive antifriction balls 7. The opposite bearing member is indicated at 8 and is secured upon the bottom of a circular receptacle 9 which is braced upon its under side by T- or I beams as is found most desirable. Secured to the bearing member 6 and passing through the bearing member 8 is a pivoting pin 10 which extends into the receptacle 9 and is inclosed in a cylinder or tube 11 which is covered by a cap 12 carried by the pin 10.

The receptacle is provided with a depending track or ring 13 which is adapted to be engaged by a screw brake 14 mounted in the bracket 15 carried upon the tank 2 in convenient position for operation by the fireman. At suitable intervals around the receptacle, there are formed openings 16 in the side thereof which are closed by doors 17 slidably mounted in the guide bars 18 which cover the side edges of the doors. The doors are provided with manipulating handles 19 and the guide bars are preferably provided with sliding bolts 20 which are arranged to hold the doors in closed or open position, as shown.

In the operation of the device, the brake 14 is released and the receptacle rotates automatically under the weight of the coal so as to bring that portion having the greatest amount toward the front of the tender or adjacent the fireman's platform. The door at this point is then opened and after the coal has been removed therefrom, the brake being set in the meantime, the door is closed and the brake released so as to permit the receptacle to rotate under the weight of the coal to again bring the greatest weight of the coal toward the front or lowest part of the receptacle. Thus, it will be seen that a constant supply of coal is always conveniently positioned and the fireman does not have to walk back to the rear of the bin as is now customary, and shovel the coal to the front and then handle it again to place the same in the fire box. The receptacle rotates automatically immediately upon release of the brake if the heaviest particle of coal is at another point in the receptacle than at the lowest.

What is claimed as new is:—

1. An engine tender having a coal receptacle mounted to rotate thereon in an inclined plane.

2. An engine tender having a receptacle mounted to rotate thereon in an inclined plane, and a plurality of doors in the receptacle.

3. An engine tender having a receptacle mounted to rotate thereon in an inclined plane, a plurality of doors in the receptacle, and means to hold the receptacle against rotation.

4. An engine tender having a coal receptacle mounted to automatically rotate thereon in an inclined plane by the weight of the coal therein.

5. An engine tender having a coal receptacle mounted to automatically rotate thereon in an inclined plane by the weight of the coal therein, said receptacle being circular in outline, and a plurality of doors arranged around the receptacle.

6. An engine tender having an inclined rotatably mounted receptacle thereon, means for holding said receptacle against rotation, doors in the receptacle, and means for holding the doors in raised and closed position.

7. In a device of the class described, an engine tender having a water tank mounted thereon, a receptacle rotatably mounted upon the water tank and being inclined from the horizontal doors for said receptacle, and a brake carried by the tank and adapted to bear against the sides of the receptacle.

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

WILLIAM HEINIG.

Witnesses:
ERNEST J. ADLER,
HUGO MOSCHNER.