J. R. ALEXANDER.

LOADING APPARATUS.

APPLICATION FILED SEPT. 12, 1911.

1,039,007.

Patented Sept. 17, 1912.

2 SHEETS—SHEET 1.

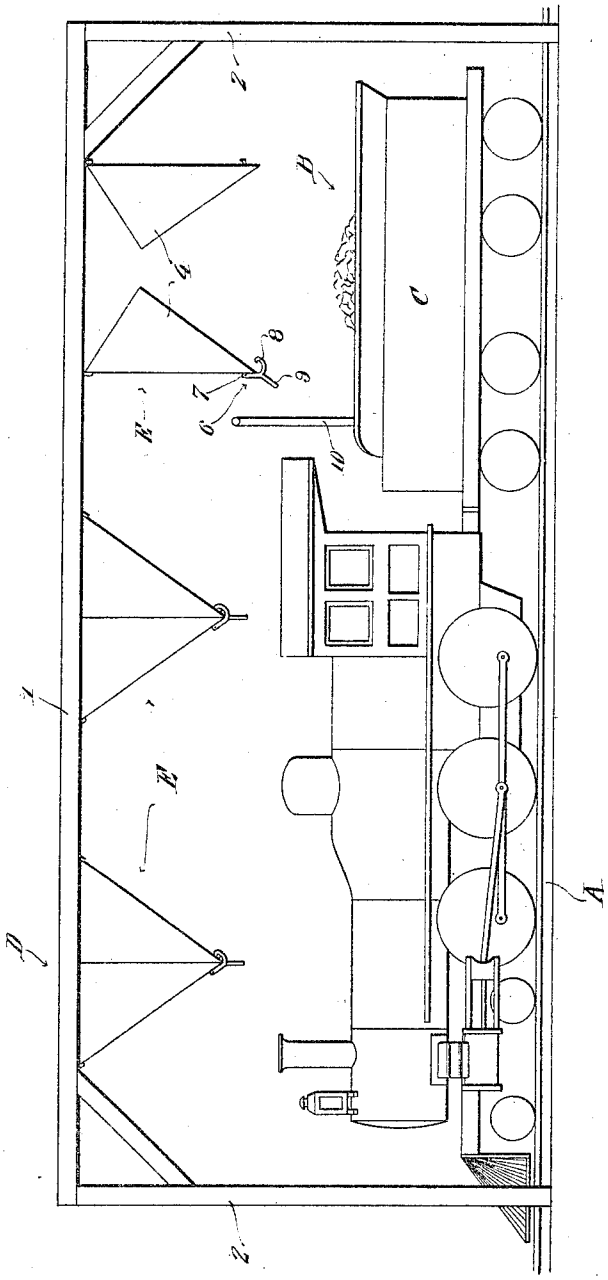


Fig. 1.

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Witnesses

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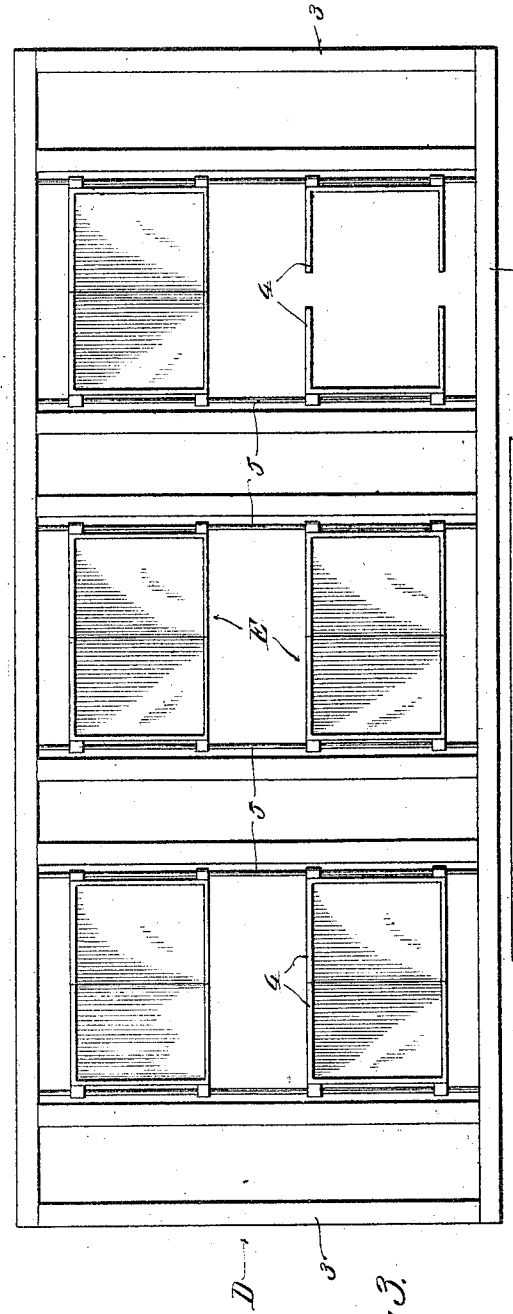


Fig. 3.

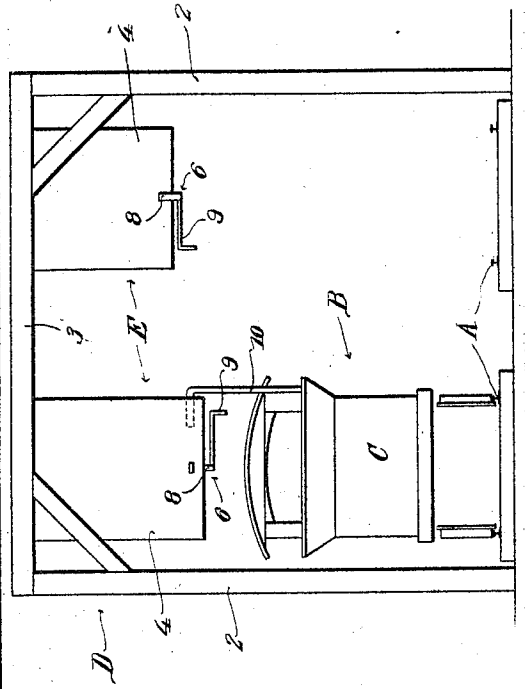


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN R. ALEXANDER, OF MOUNT SIDNEY, VIRGINIA.

LOADING APPARATUS.

1,039,007. Specification of Letters Patent. Patented Sept. 17, 1912.

Application filed September 12, 1911. Serial No. 648,841.

To all whom it may concern:

Be it known that I, JOHN R. ALEXANDER, a citizen of the United States, residing at Mount Sidney, in the county of Augusta and State of Virginia, have invented new and useful Improvements in Loading Apparatus, of which the following is a specification.

The present invention relates to certain novel and useful improvements in loading apparatus and has particular application to an apparatus for loading coal cars, locomotive tenders, and the like.

In carrying out my invention, it is my purpose to provide an apparatus whereby the tender, or cars may be rapidly loaded, while the train is in motion, the tender or car being provided with means for automatically opening the bins or other receptacles, containing the material such as coal, whereby the load may be dropped into the tender or car.

It is also my purpose to provide a structure of this type which may be installed over a railroad track, at predetermined points along the road, the bin or series of bins containing the coal or other material being suitably supported and spaced apart upon a frame.

It is also my purpose to provide a loading apparatus embodying the desired features of simplicity, durability and strength coupled with economy and the cost of construction and installation.

With the above-recited objects and others of a similar nature in view, the invention consists in the construction, combination and arrangement of parts, set forth in and falling within the scope of the appended claim.

In the accompanying drawings:—Figure 1 is a view in side elevation of an apparatus embodying my improvement, the same installed above a railroad track in position to deliver a load to a train. Fig. 2 is an end view. Fig. 3 is a top plan view.

Referring to the accompanying drawings in detail, the letter A designates the ordinary railroad track with the train of cars B traveling therealong, it being assumed for the purpose of description of this invention, that it is desired to fill the tender of the locomotive, which is indicated at C. Erected above the track is a suitable trestle or framework, which is indicated at D and comprises the horizontal beams or girders 1 and the vertical standards or supports 2, while the numerals 3 are the cross bars for the frame, connecting the horizontal girders or beams. The bins for the frame are each designated by the letter E and are each formed of two sections 4—4, which, when assembled form receptacles of inverted cone-shape in cross section, each section of the bin being hinged at their outer edges to the hinge rod 5 extending transversely between and supported by the longitudinal beams or girders. It will, of course, be understood that instead of employing the hinge rods extending between the two beams, I may employ pintles or studs engaging with perforated lugs or ears carried by the sections of the bin and thereby forming pivots or hinges from which the sections are suspended. At the apex of each bin or receptacle, I provide a fastening device or lock 6 pivoted as at 7 to one of said sections, said lock having a curved latching arm 8 engaging with the opposite section while 9 designates a depending stud or arm adapted to be struck by the vertical rod or bar 10 carried by the tender of the locomotive. It will be noted that I have provided a series of bins suitably spaced apart and suspended directly over the track.

From the above description, taken in connection with the accompanying drawings, the construction and manner of using my apparatus will be readily apparent. As the train approaches the frame the speed of the same is reduced so that it proceeds slowly through the frame beneath the suspended buckets or bins. As it reaches the individual bins the rod or bar carried by the tender strikes against the depending arm 9 of the latching device, thereby swinging the same on the pivot 7 and withdrawing the curved latching frame 8 from locking engagement with the adjacent bucket or bin. This unlocks the two sections at the apex and permits the weight of the load to force the sections apart, the load then falling by gravity into the tender beneath the same. The same action occurs in each of the bins or buckets, and in case it is desired not to use the coal within certain of the bins, the tripping rod or bar 10 of the tender may be removed out of the path of the latching devices.

It will be seen that I have provided a structure which may be erected over any stretch of railway track at comparatively little expense and by the use of such apparatus, moving trains may be quickly and automatically loaded thereby avoiding the loss of

time due to the delay incident to stoppage to take on the load of coal or other material.

I claim:—

A loading apparatus comprising a stationary frame, a stationary receptacle adapted to contain a load and formed of two sections suspended from said frame and hinged directly thereto and movable toward and away from each other, and a latching device pivoted adjacent to the lower edge of one of said sections and having a member engaging with the adjacent portion of the opposite section to connect the sections in receptacle formation, said latching device being designed to be tripped by means carried by a car or the like passing beneath the receptacle for the purpose of delivering the load.

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

JOHN R. ALEXANDER.

Witnesses:
JOHN CRITCHER,
JOHN A. ALEXANDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."