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J. W. HARKOM.

COAL SPACE IN LOCOMOTIVE TENDER TANKS.

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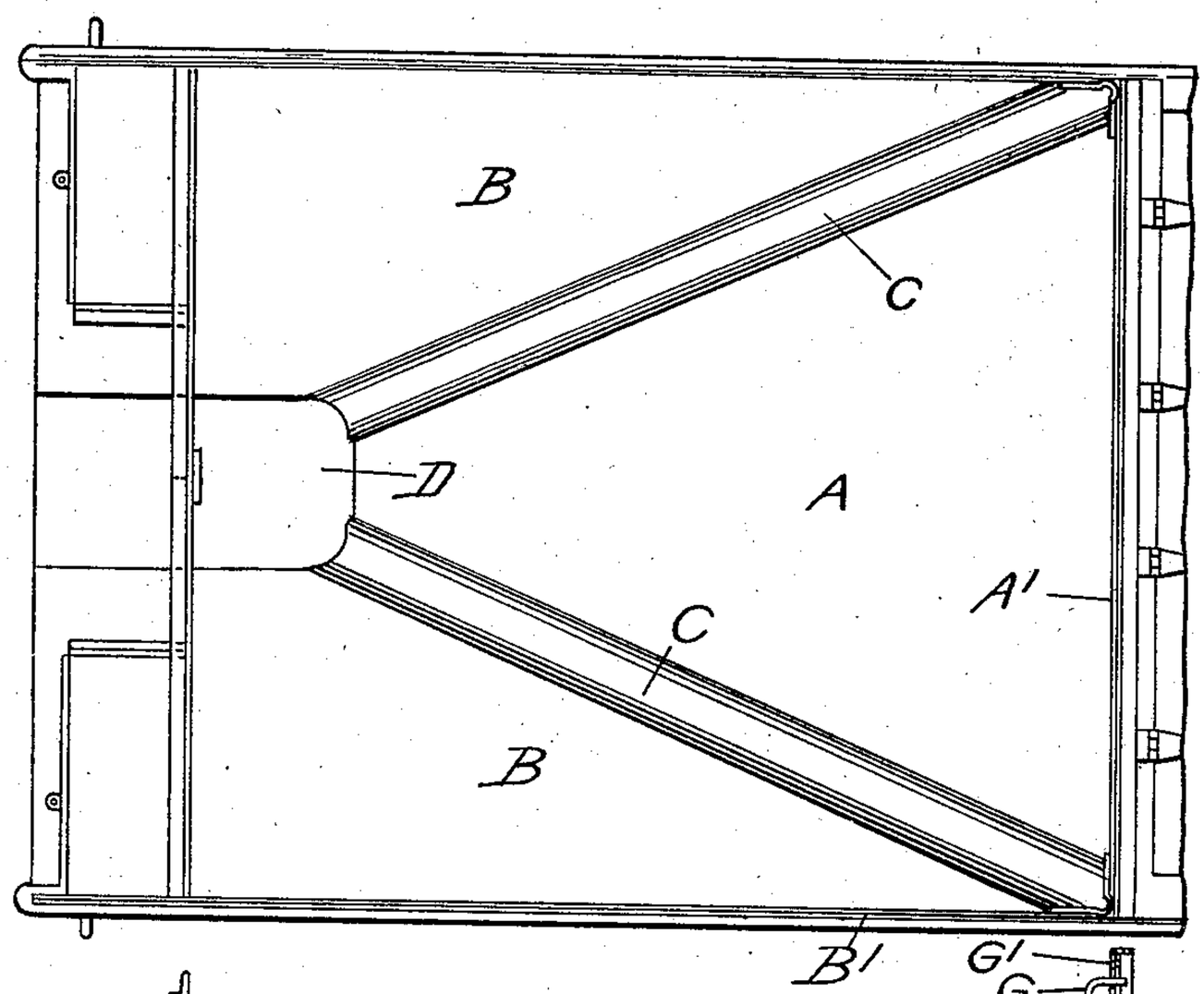

Fig. 1.

Fig. 2.

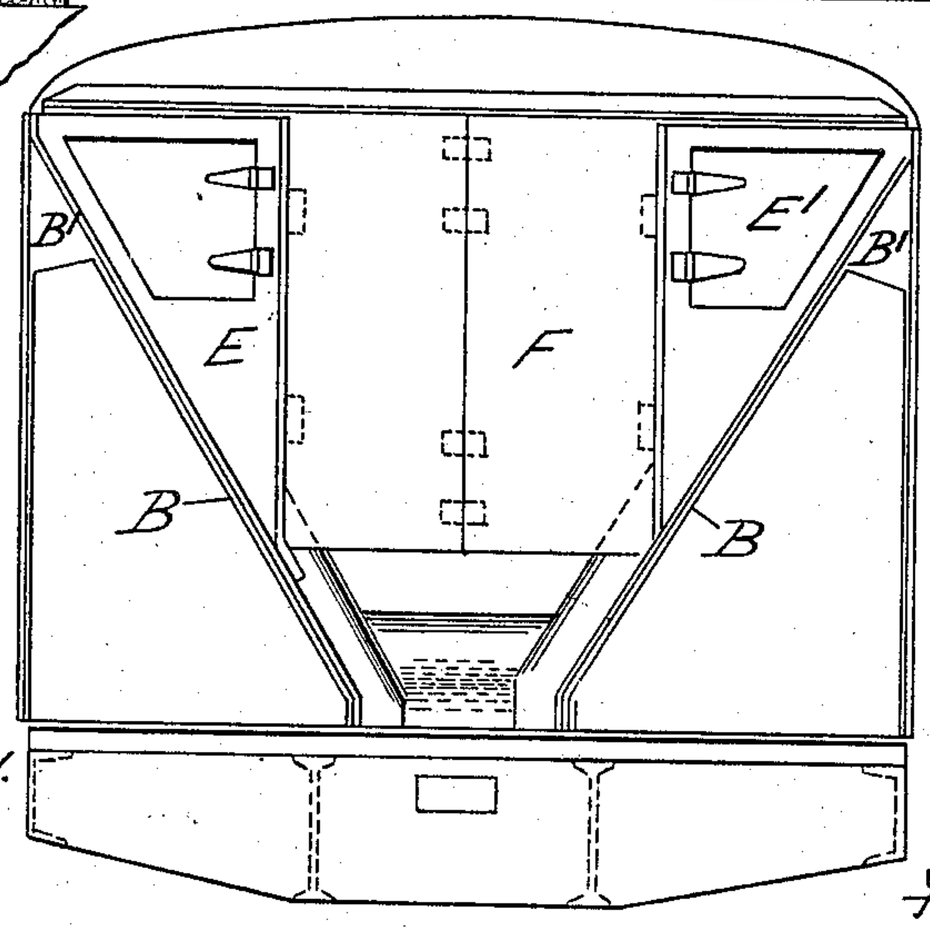

Fig. 3.

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COAL-SPACE IN LOCOMOTIVE-TENDER TANKS.

No. 891,335. Specification of Letters Patent. Patented June 23, 1908.

Application filed September 18, 1907. Serial No. 393,515.

To all whom it may concern:

Be it known that I, JOHN WILLIAM HARKOM, of Davenport, in the township of York, in the county of York, in the Province of Ontario, Canada, mechanical engineer, have invented certain new and useful Improvements in Coal-Spaces in Locomotive-Tender Tanks, of which the following is the specification.

My invention relates to improvements in coal spaces in locomotive tender tanks, and the object of the invention is to devise a form of hopper, which will insure of the coal passing forward and being retained within convenient reach of the fireman and it consists essentially of a hopper having inclined sides and back converging at the front to a shoveling space, tool cupboards located at the front of the inclined sides and the hopper doors, all arranged and constructed in detail as hereinafter more particularly explained.

Figure 1, is a plan view of my improved coal space or hopper. Fig. 2, is a longitudinal section. Fig. 3 is a face view looking to the front of the hopper.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the inclined back of the hopper, which is secured at the top to the vertical plate A′, and B B are the inclined sides of the hopper, which are secured at the sides to the sides B′ of the tender.

The inclined back A is provided with reinforcing angle irons A^2 and an intermediate supporting vertical cross plate A^3 arranged as shown beneath the reinforcing angle irons A^2.

C are inclined corner strips, which extend from the top back corners of the hopper to the shovel space D being bent laterally and also upwardly at the back into the corner and downwardly at the front beneath the shovel space. The strips C are suitably fastened to the inclined sides.

The shovel space D is scoop-shape in form, the bottom plate D′ being supported upon the cross bars D^2 and D^3. The front of the plate D′ is bent downwardly over the front of the cross bars D^2.

All the plates herein mentioned as well as the angle irons and strips are preferably formed of steel plate or channel steel.

E are the tool cupboards, which have inclined sides to fit the sides B B of the hopper and are provided with suitable doors E′.

F are the doors of the coal chute, which are of any approved form and extend between the outer sides of the cupboard E near the outer edge being hinged and provided with suitable hinges and locking lips as indicated by dotted lines.

G is the top cross tie rod and G′ is the top cross tie plate.

Having now particularly described the principal parts involved in my invention I shall briefly describe its utility.

By the form shown it will be noticed that all the coal will pass forwardly to the shovel space D, which is scoop-shaped. Such coal will practically assume the position shown by the dotted lines 2 and 3, the dotted line 2 indicating the center of the coal and the dotted line 3 the side. Of course, when there is more coal in the hopper a somewhat of a little contour will be formed heaping up above the top of the coal space. In any event, however, it will be seen that the coal will be retained in the hopper and that the point of shoveling for the fireman will be at the forward end of the hopper in the shovel space, which is an important desideratum. The coal naturally will always fill this space.

What I claim as my invention is:

1. In a coal space in locomotive tender tanks, the combination with the sides, back and front plates of the tender, of the inclined central back plate and the inclined side plates converging to a point central of the width of the front of the tender and in proximity to the front vertical plates or face of the tender in such a manner as to leave a horizontal shovel space in adjacent to the front of the tender and the front edge of the space flush with the front of the tender, whereby the area of the shovel space is within reach of the fireman when at his post firing as and for the purpose specified.

2. In a coal space in locomotive tender tanks, the combination with the sides of the tender and vertical back plates, of the inclined central back plate and the inclined sides converging to the front, a shovel space at the forward end at substantially the point of converging, and comprising a scoop shape plate supported on vertical cross bars as and for the purpose specified.

3. In a coal space for locomotive tender tanks, a scoop-shaped plate inclined up-

wardly from rear to front and suitably supported and adapted to fit the shovel space as specified.

4. In a coal space for locomotive tender tanks, a scoop-shaped plate inclined upwardly from rear to front and provided with a front ridge and suitably supported and adapted to fill the shovel space as specified.

5. In a coal space in locomotive tender tanks, the combination with the sides of the tender and vertical back plates, of the inclined central back plate and the inclined sides converging to the front, a shovel space at the forward end at substantially the point of converging, and the cupboards having the inclined sides and the doors hinged to the cupboards and extending down to a point in proximity with the outer edge of the shovel space as and for the purpose specified.

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Witnesses:
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