

(No Model.)

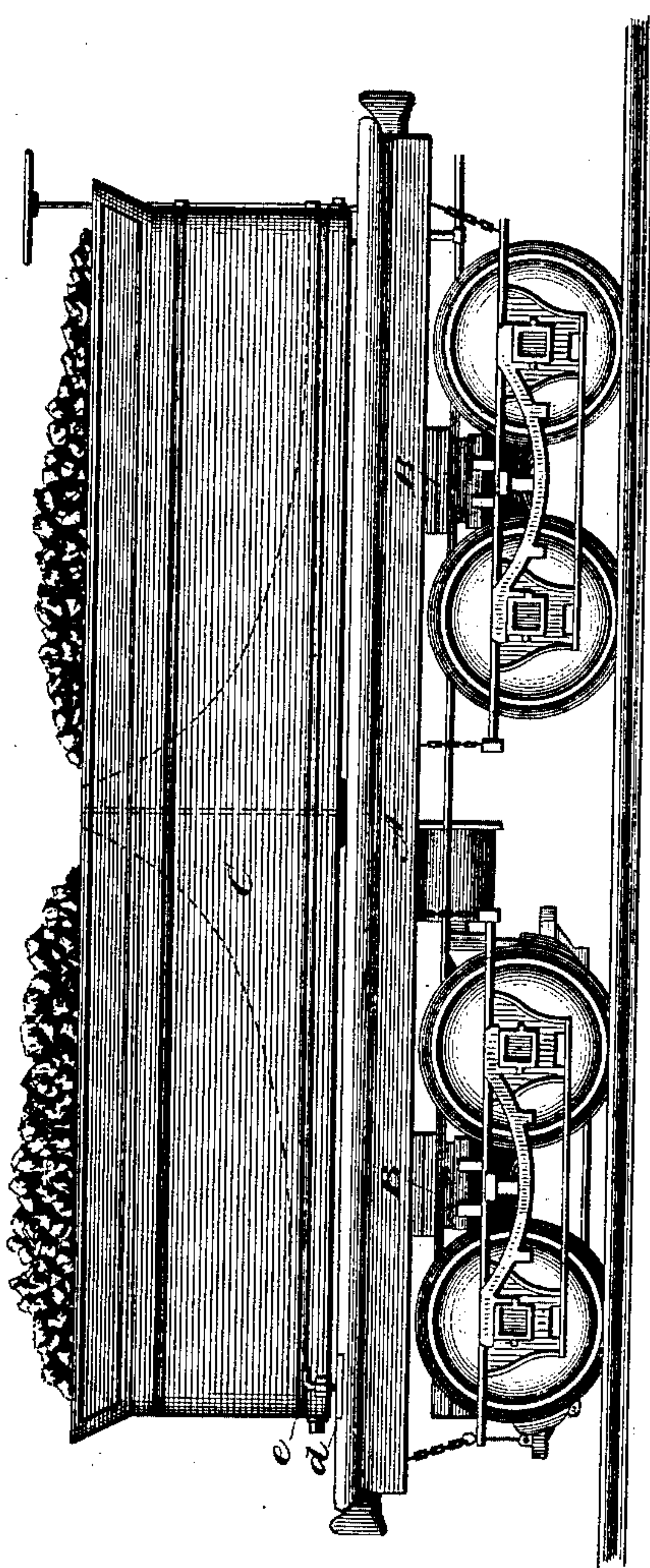
2 Sheets—Sheet 1.

R. G. S. COLLAMORE.

LOCOMOTIVE TENDER.

No. 371,251.

Patented Oct. 11, 1887.



Witnesses  
*J. S. Elliott*  
*H. Kennedy*

Inventor  
*R. G. S. Collamore*  
By his Attorney  
*William B. Linn*

(No Model.)

2 Sheets—Sheet 2.

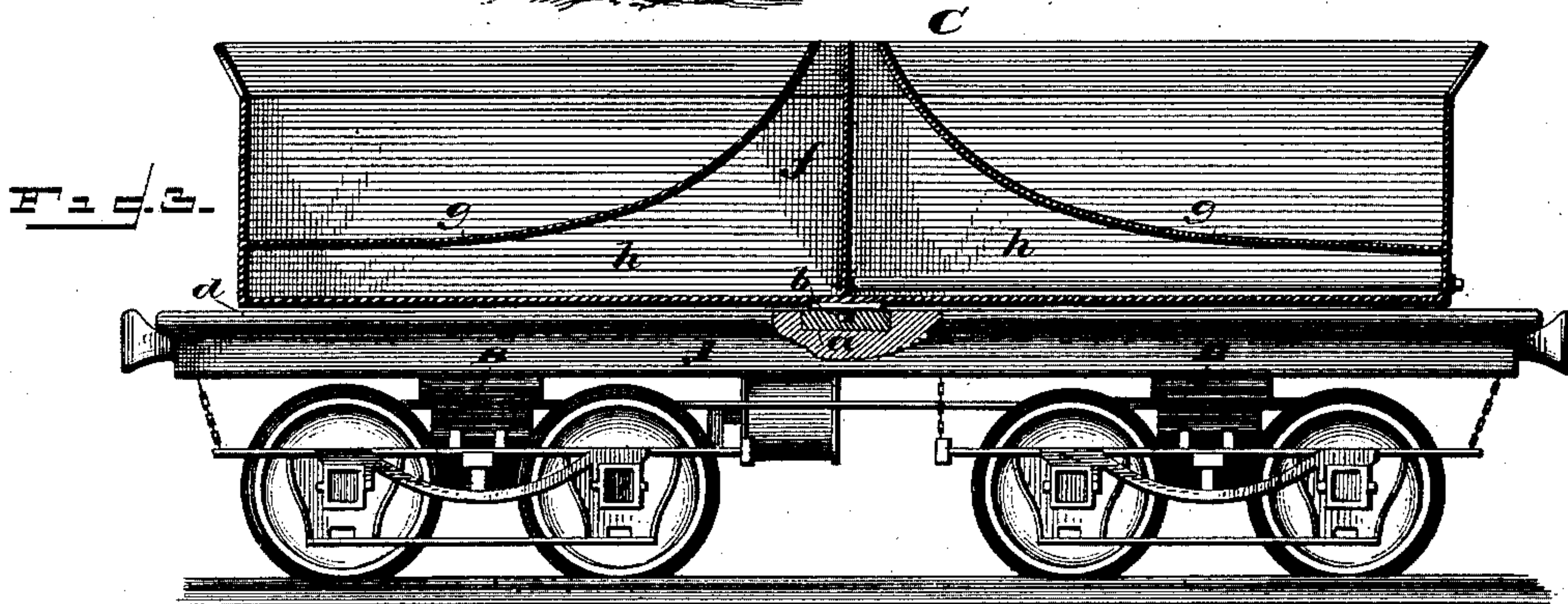
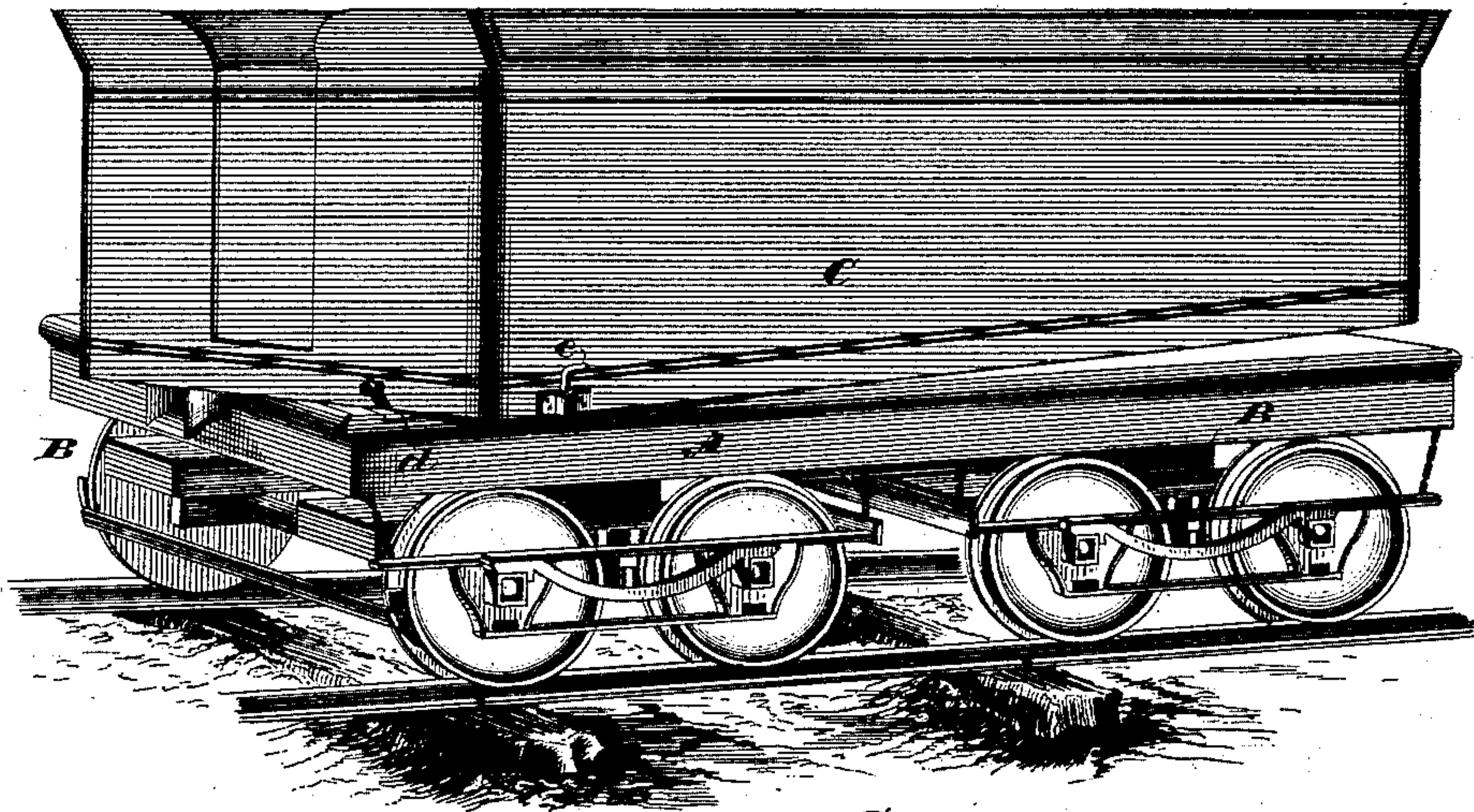
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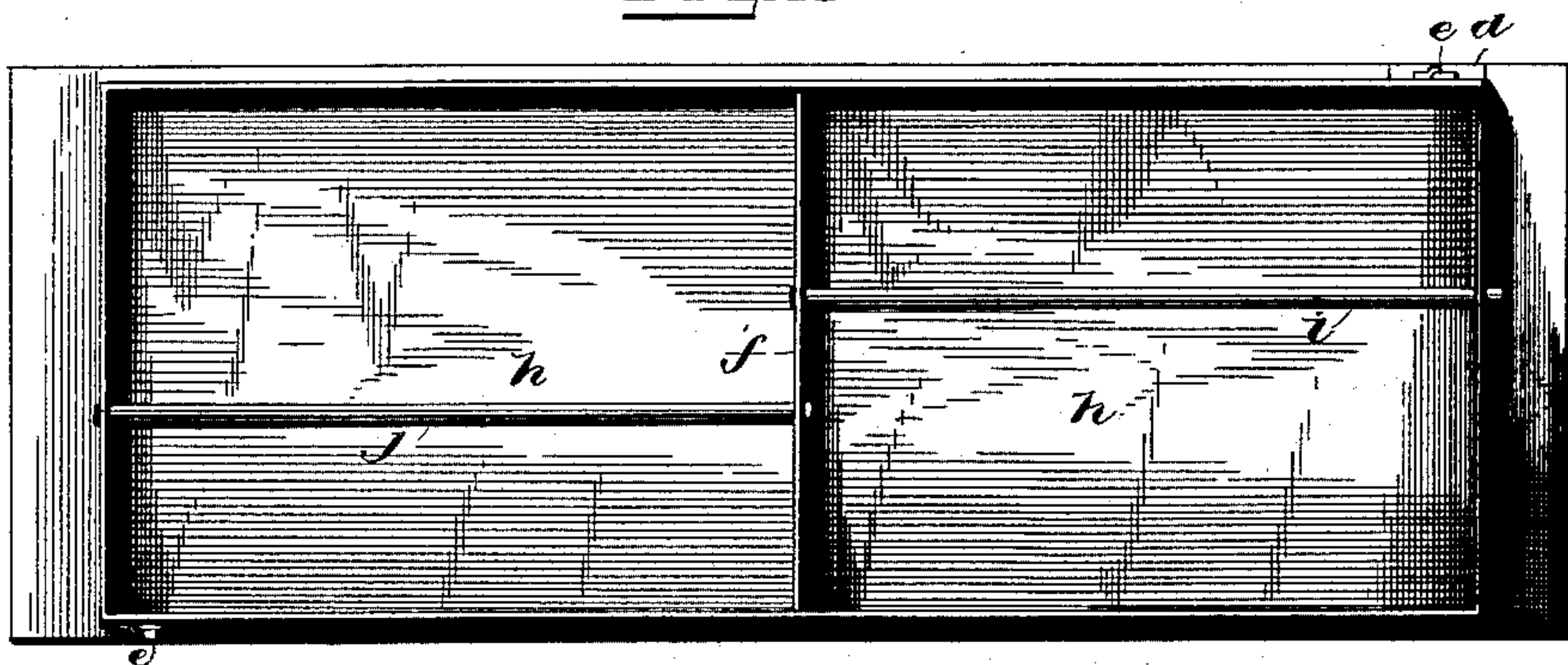
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*Figs. 2-3*



*Figs. 4-5*



Witnesses

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# UNITED STATES PATENT OFFICE.

ROBERT GOULD SHAW COLLAMORE, OF BOSTON, MASSACHUSETTS.

## LOCOMOTIVE-TENDER.

SPECIFICATION forming part of Letters Patent No. 371,251, dated October 11, 1887.

Application filed February 19, 1887. Serial No. 228,242. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT GOULD SHAW COLLAMORE, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Locomotive-Tenders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to tenders for locomotive-cars, and has for its object to provide a tender that, while exceeding the capacity of the ordinary tender, will at the same time retain the fuel and water in such position that they will be as convenient for service as they are in ordinary tenders.

Existing forms of tenders, so far as I am aware, have uniformly been made much shorter in length than either the locomotives or cars, for the reason that coal necessarily has to be maintained close to the cab for convenient removal thereto, and for the further reason that the multifarious duties of the fireman render it important that but little time be lost in taking the coal from the bunk in feeding the engine. Another reason rendering quick coal-ing necessary is that it is frequently important that the furnace-doors be opened and closed as speedily as possible. Such necessities would not be attained by simply increasing the dimensions of the coal-bunk by enlarging or extending the tender.

From the foregoing it will be readily understood that upon extended trips the coal-bunk has to be either frequently replenished or, what is customary, an additional tender is used, and the coal shoveled from the rearmost tender into the bunk of that next to the engine. This involves additional tenders, labor, time, and expense.

By my improved tender I secure all the advantages incident to ordinary tenders, and at the same time augment the supply of coal without the present disadvantages occurring during long runs.

In the accompanying drawings, forming part

of this specification, Figure 1 is a side elevation of a locomotive-tender embodying a preferred form of my improvements. Fig. 2 is a perspective view of the tender illustrated in Fig. 1, showing the body partially turned in the operation of reversing the coal-bunks. Fig. 3 is a longitudinal section of the tender-body, and Fig. 4 is a detail view.

A designates a frame, which is supported by the trucks B B, the said frame being provided at its center with a casting or socket, *a*, provided with a vertical opening.

C refers to the tender-body, which, as shown in the drawings, is somewhat extended, being about twice the length of an ordinary tender. This body C is provided on its underside with a pin, *b*, which bears in the casting *a*. The frame A is provided at one end with a recessed plate, *d*, with which is adapted to engage a bolt, *e*, located at each end of the body C, so that the latter will be rigidly locked on the frame.

It will be noticed that the body C is centrally divided into two compartments or chambers by means of a transverse partition, *f*, Fig. 3. Each compartment is provided with a curved plate, *g*, which extends from the top of the body a short distance from the upper portion of the plate *f*, and extends downward and terminates at the end of the body a short distance from the bottom of the same. Each curved plate *g* is similar to the ordinary bunk-bottom and forms part of the walls of the water-chamber *h* beneath the bunk. Each end of the body is provided with the usual water-coupling devices incident to the water-supply of an ordinary tender.

In operation the coal and water are first used from one end of the body, and when exhausted the bolt *e* at that end is disconnected from the plate *d*, and the body then swung on its pivot, so that the coal and water supply at the other end is brought into position adjacent to the cab. The bolt of the said end is then caused to engage the plate, and the coal and water of that end can be used.

It will be obvious that by having separate water-chambers the water-supply is not maintained for so long a period at a low level as would be the case if, instead of independent water-chambers, a single extended water-



chamber were used. Another advantage in using independent water-chambers results from the fact that the splashing incident to a large amount of water at a low level is prevented.

Any number of connections with the locomotive, in addition to the usual coupling devices, may be employed to prevent the tender from tilting when the body is shifted.

In Fig. 4 I have represented an arrangement of feed-pipes in connection with the two tanks, which will be found preferable in practice. In said figure the supply-pipe *i* of one water-tank extends to the opposite end of the body, and there terminates in the usual coupling arrangement, while the feed-pipe *j* of the other water-chamber extends to the other end of the body, and also terminates in the usual coupling arrangement. By this construction the water can be used from the chamber at one end while the coal is being used at the other end, thereby insuring an even distribution of the weight of the coal and water at all points of the body, and enabling the weight of one end to counterbalance that of the other when the body is swung on its pivot.

Any suitable arrangement of gate or gates may be employed for closing the end of the tender when not in service.

From the foregoing it will be seen that a tender embodying my improvements is simple and durable in construction and useful as well as effective in operation.

I do not limit myself to the precise arrangement or construction of parts herein described, as the same may be subject to modification

and change without departing from the spirit of my invention.

I claim—

1. A tender having a supporting frame, a body pivotally mounted thereon, and provided at each end with a coal-supply bunk, substantially as set forth.

2. A tender having a supporting-frame, a body pivotally mounted thereon, and provided at each end with an independent coal-bunk, substantially as set forth.

3. The combination, in a tender, of a supporting-frame, a body mounted thereon and provided with a coal-bunk and water-tank at opposite ends, and devices for locking said body against pivotal movement, substantially as set forth.

4. A tender having a supporting-frame, a body pivotally mounted thereon and provided with a coal-bunk, and having an independent water-chamber at each end, substantially as set forth.

5. The combination, in a tender, of a body open at both ends, an independent water-chamber located at each end, and a pipe longitudinally extending from each water-chamber to the opposite end of the body for connection with the feeding device, substantially as set forth.

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

ROBERT GOULD SHAW COLLAMORE.

Witnesses:

GEORGE B. BIGELOW,  
ALICE A. MERRILL.