No. 623,267. Patented Apr. 18, 1899.

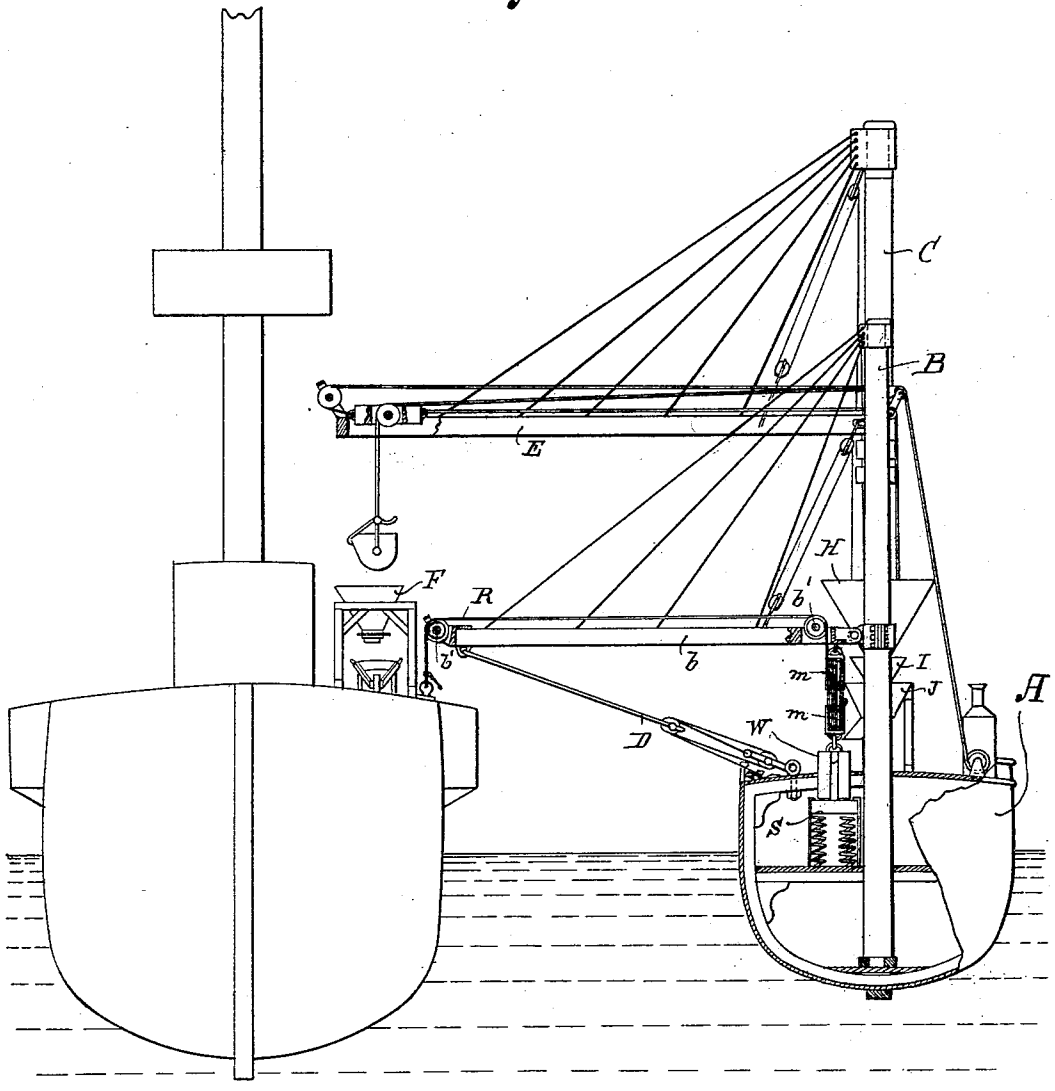
J. E. WALSH.

FREIGHT DELIVERY VESSEL.

(Application filed May 21, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



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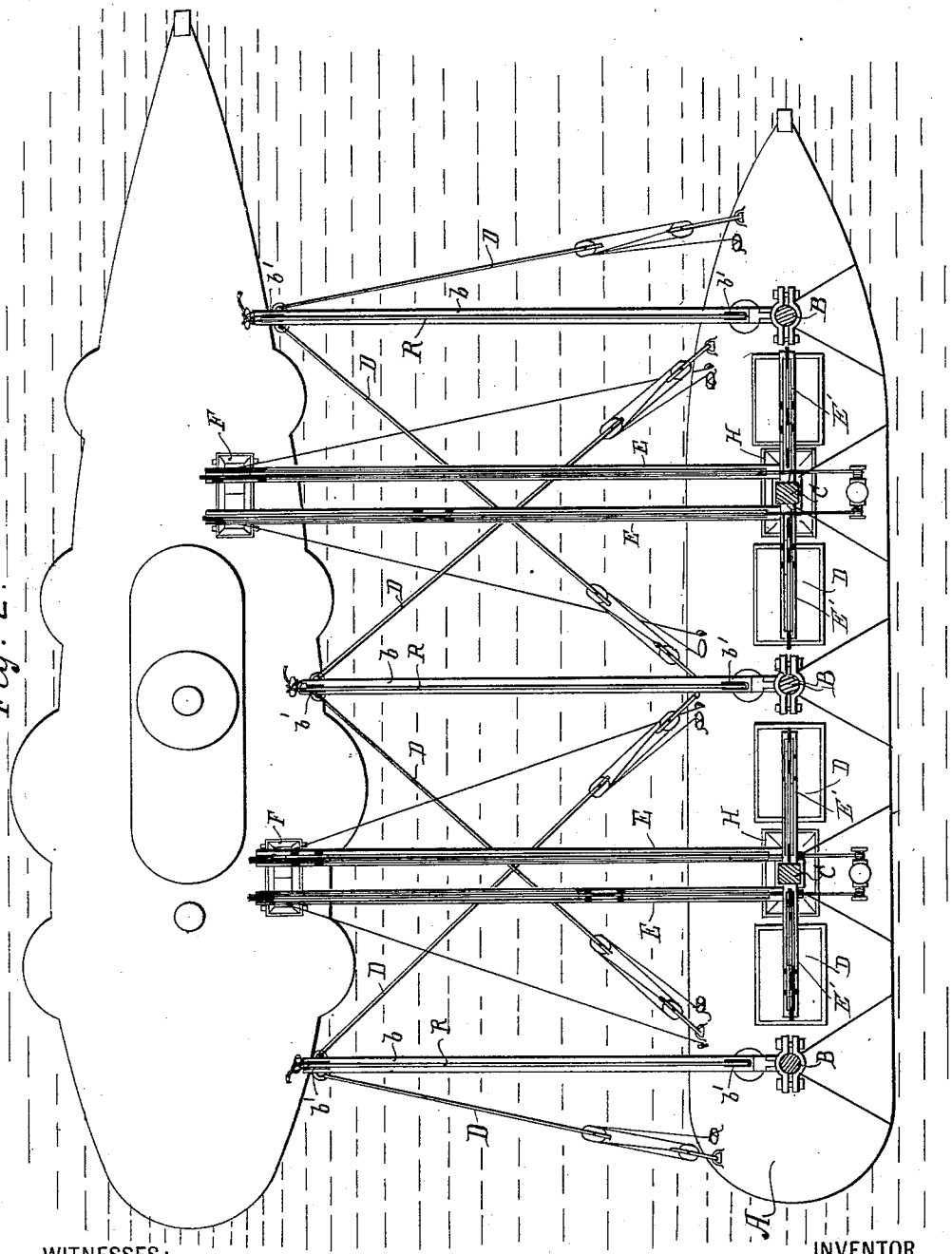
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(Application filed May 21, 1898.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN E. WALSH, OF NEW YORK, N. Y.

FREIGHT-DELIVERY VESSEL.

SPECIFICATION forming part of Letters Patent No. 623,267, dated April 18, 1899.

Application filed May 21, 1898. Serial No. 681,281. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. WALSH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Freight-Delivery Vessels, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to vessels or barges for delivering freight, and more especially to coal-delivery vessels; and my invention consists in providing a vessel whose hold is preferably subdivided into separate departments with apparatuses, substantially as described and claimed, to separate the coaling vessel from the ship to be coaled, thus enabling coaling in a moderate seaway, and with properly distributed and fitted cranes for the speedy delivery of the coal, grain, or other freight.

In the accompanying drawings, Figure 1 is an end view, partially in section, of my improved freight-delivery vessel being rigged together with a ship to be loaded ready for the transfer of freight. Fig. 2 is a plan view of Fig. 1.

Upon a good-sized preferably sea-going distributing vessel A, having departments separated by water-tight bulkheads, are mounted masts B C, one between each two hatches. In the case illustrated in the drawings, where a vessel with four departments and four hatches is represented, five masts, for instance, would be employed. Of these masts the center mast and the two outer masts B B are fitted with long booms or outriggers *b b*, which when in use are rigged at a short distance above the deck of vessel A and extend at right angles to its longitudinal axis in a horizontal position. In this position they are secured by suitable vangs and guys D D.

Upon the end of each boom and near its foot-block are mounted sheaves *b' b'* for guiding an anchor-rope R, hereinafter described. Of two pulley-blocks *m m*, through which the rope R is passing, one is suspended, preferably, from a boom *b*, while to the other a heavy weight *w* is secured, the latter resting upon a spring-cushion *s*, which serves to regulate the tension of the rope and to receive all sudden blows caused by the rolling of the vessels. The anchor-rope R, one end of which is secured to a purchase-block *m*, after passing through the sheaves in the blocks *m m*, is guided with its other end over the sheaves *b' b'* on a boom *b*, and this end is secured to a cleat on the vessel to be coaled and hauled in as tight as possible, and this operation is repeated on each of the three booms *b*, thus anchoring the two vessels firmly together. With the proper selection of weights the ropes R R, together with the booms *b* and guys D D, will secure both vessels together at a desirable distance from each other and yet allow for a limited independent movement of each vessel, as might be caused by a moderate seaway, each weight *w* always taking up the slack of its coördinate rope R as soon as the tension at a certain point ceases and giving an elastic resistance to a one-sided pressure of a sea-wave trying to disturb an equilibrium. The other two masts C C on my freight-delivery vessel are fitted each preferably with four booms, two of which, E' E', extend in a longitudinal direction one over each adjoining hatch and serve to transport the freight or coal by means of buckets or bags suspended from the customary trolleys from the hold of the vessel and to deliver the same into a hopper H, provided at a proper height around each mast C. From there the coal is drawn into a weighing-machine hopper I, and from there into a delivery-hopper J, from which the freight is drawn into bags or coal-buckets, which in turn, by means of trolleys upon the booms E E, extending transversely over and beyond the deck of vessel A, are dispatched to the vessel to be coaled and delivered into a portable hopper F, mounted upon a portable frame at a height sufficient to allow a man with a wheelbarrow to pass under the spout and after filling the wheelbarrow or other receptacle to proceed on his errand without waiting. These hoppers F, with their frames, are carried upon the vessel A and placed upon the deck of a vessel to be loaded at the start. It is evident that thus an uninterrupted continuous stream of loaded coal-buckets can be delivered from a distributing vessel to a vessel to be coaled, the empty buckets being returned automatically, preferably by weights suspended from hoisting-tackle.

The vessel A is provided with steam-boilers for working the hoisting-machines and for propelling the vessel.

Although coal is mentioned heretofore as the article thus to be loaded, it is evident that grain, sulfur, and numerous other articles can be handled by the same apparatus substantially in the same manner.

The loading operation having been completed, all projecting booms are easily disconnected (after untying the ropes R) and swung out of the way into nearly-vertical positions alongside their respective masts by means of hoisting-tackles, and the freight-delivery vessel A can proceed under its own steam to another vessel or when empty to a coaling-station.

Having thus described my invention, I claim—

1. In a freight-delivery vessel the combination of a hull A having masts B B provided with booms *b b* carrying sheaves *b' b'* pulley-blocks *m*, *m* weights W W and anchor-ropes R R secured at one end to said weights and at the other to another hull, spring-cushions S S secured upon said hull A guys D D masts C C carrying booms E E and E' E' means substantially as described for transferring freight on said boom to and from said hull A as and for the purposes herein shown and described.

2. In a freight-delivery vessel the combination of a hull A having masts B B booms *b b* supported from said masts and carrying sheaves *b' b'*, guys D D, anchor-ropes R R, pulley-blocks *m m*, weights W W, and spring-cushions S S, each of said ropes R being secured at one end to a weight W and at the other adapted to be secured to another hull as and for the purposes herein shown and set forth.

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

JOHN E. WALSH.

Witnesses:

HENRY C. MECKLEM, Jr.,

ELMER J. SNYDER.