No. 685,580. Patented Oct. 29, 1901.

J. G. DELANEY.

MARINE CONVEYER.

(Application filed Apr. 25, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

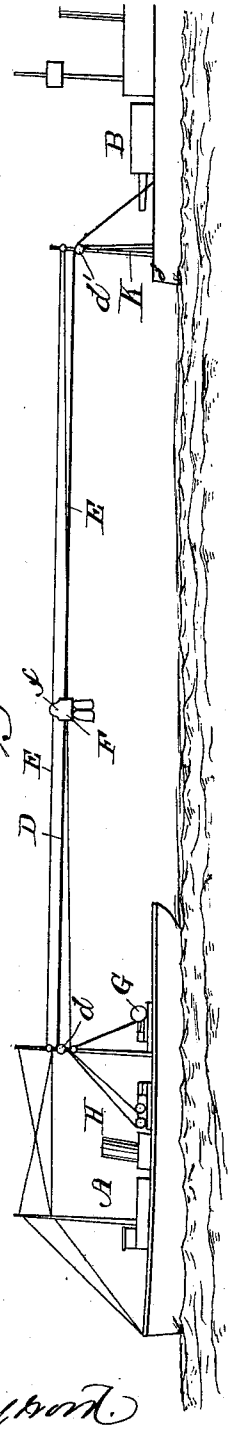
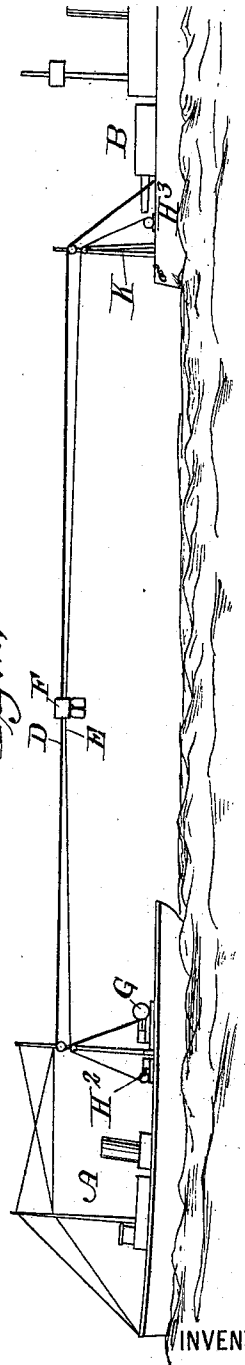


Fig. 2.



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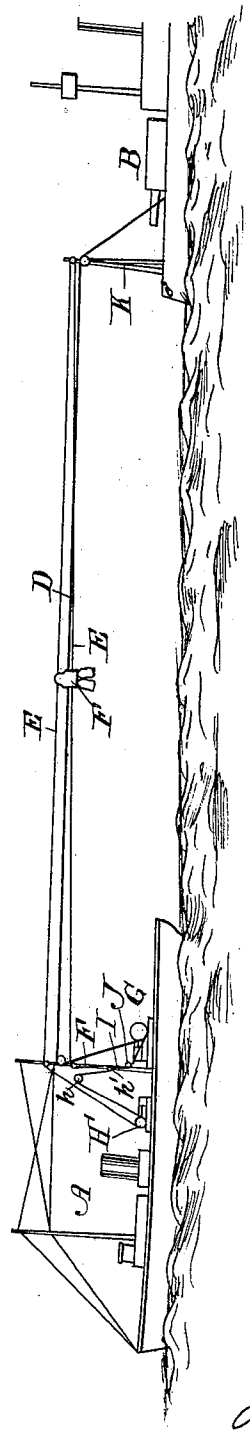
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Fig. 3.



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UNITED STATES PATENT OFFICE.

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MARINE CONVEYER.

SPECIFICATION forming part of Letters Patent No. 685,580, dated October 29, 1901.

Application filed April 25, 1900. Serial No. 14,309. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. DELANEY, a citizen of the United States, and a resident of New York city, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Marine Conveyer, of which the following is a full, clear, and exact description.

My invention relates to an improvement in marine conveyers or devices for transferring goods between two relatively-moving objects—such, for instance, as between two vessels at sea.

My invention comprises novel features which will be hereinafter described, and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which the figures represent, in side elevation, two ships having my device applied thereto, different operating means being shown in each figure.

One of the principal uses of my device, although not the only one to which it may be put, is to convey supplies from a collier or other supply vessel to a warship. In the figures of the drawings my device is shown used in this connection. These figures show a collier A and a warship B, the two being connected by means of a cable D, which serves the double purpose of a tow-line and a cableway over which a carrier F may be run in order to transfer the coal or other supplies from one vessel to the other. One end of the cable D is herein shown as being fixedly secured to one of the vessels, the drawings showing this cable as being fixedly secured to the warship, although it might be fixedly secured to the collier, if desired. This cable also passes over guides located in an elevated position upon the vessels, the support herein shown consisting of a pair of shear-legs K upon the warship and a mast of the collier. The cable is supported upon the mast of the collier by passing over a sheave or pulley, which is supported from the mast. This is desirable, as the cable should be arranged so that it will give and recover a certain portion of its length as the vessels are influenced by the waves and the heave of the swells. For this purpose the cable D is conducted to and made fast upon the drum G of a compensating engine—that is, an engine which will pay out or take up the cable as the strain varies thereon. This engine may be an ordinary towing-engine or one constructed on a similar principle and is not illustrated in detail, as such engines are well known in the art.

The carrier F is caused to travel back and forth between the two vessels by any of the usual forms of apparatus used for this purpose in connection with the ordinary cableway. The means shown in Figure 1 consists of a double-drum engine H, mounted upon the collier, and the line E, the ends of which are connected to wind upon the drums and which pass over suitable guide-pulleys to the warship and back and has the carrier F secured thereto. The means shown in Fig. 2 consists of a drum H^3, mounted upon one of the vessels, and a drum H^2, mounted upon the other vessel, said drums each receiving one end of the line E, which is attached to the carrier, and winding up or paying out this line, according to the direction it is desired to move the carrier. The means shown in Fig. 3 consists of an endless line E, which has the carrier connected therewith and passes over guide-pulleys on the shear-legs and mast and about a drum of an engine H'. To provide for the necessary slack, one bight of the line E is passed over two additional pulleys h and h', the pulley h being fixedly supported and the pulley h' being attached to one end of a short cable I, which leads to and is connected to wind upon the drum of the compensating engine G, so that it is let out and taken up with the supporting and towing cable D. The drums for operating the traversing line E may be operated by any suitable form of motor, either steam or electric. The particular form of device used for traversing the carrier is immaterial, the forms herein shown being given simply as illustrations of forms which may be used. It is also immaterial whether the compensating engine which controls the strain upon the cableway and towing-line D is mounted upon the collier or the war vessel. In practice it will probably be found more convenient to mount this engine upon the collier, as shown in the drawings.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a device for transferring goods between boats or other relatively movable structures, a combined spacing and load-supporting line, a carrier mounted to travel on said line, and means for traversing the carrier upon the line, substantially as described.

2. In a cableway for boats or other relatively movable objects, the combination of a combined load-supporting and towing line connecting the boats, an automatically-yielding connection for one end of said line, a carrier adapted to travel upon said line, and means for traversing said carrier, substantially as described.

3. In a device for transferring goods between boats or other relatively movable objects, the combination of a combined towing and load-supporting line, and means for maintaining it at substantially an even tension, with a carrier adapted to traverse said line, and means for traversing said carrier, substantially as described.

4. In a device for transferring goods between two relatively movable structures, a combined spacing and load-supporting line, a load-carrier movable on said line, a traversing line connected with said carrier, means for actuating said traversing line, and a tension device connected with both of said lines.

5. In a device for transferring goods between two boats or other relatively movable structures, a combined spacing and load-supporting rope, a carriage movable thereon, a substantially endless traversing rope connected with the carriage, means for actuating the traversing rope, a tension device acting upon the supporting and spacing rope, and a guide receiving a loop of the traversing rope and connected with the tension device to be moved in unison with the supporting-rope.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES G. DELANEY.

Witnesses:
EDW. E. QUINCY,
W. B. SCOTT.