

[54] **SHIP FOR CONTAINERIZED CARGO**

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[51] Int. Cl. **B63b**

[58] Field of Search 114/72, 73, 74 R, 74 A, 74 T, 114/75, 76, 78, 83, 0.5 R, 0.5 F, 0.5 T, 16.4; 214/12-15 R; 9/30, 32, 33, 14, 11 A; 244/122 A, 122 AE

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Assistant Examiner—F. K. Yee

[57] **ABSTRACT**

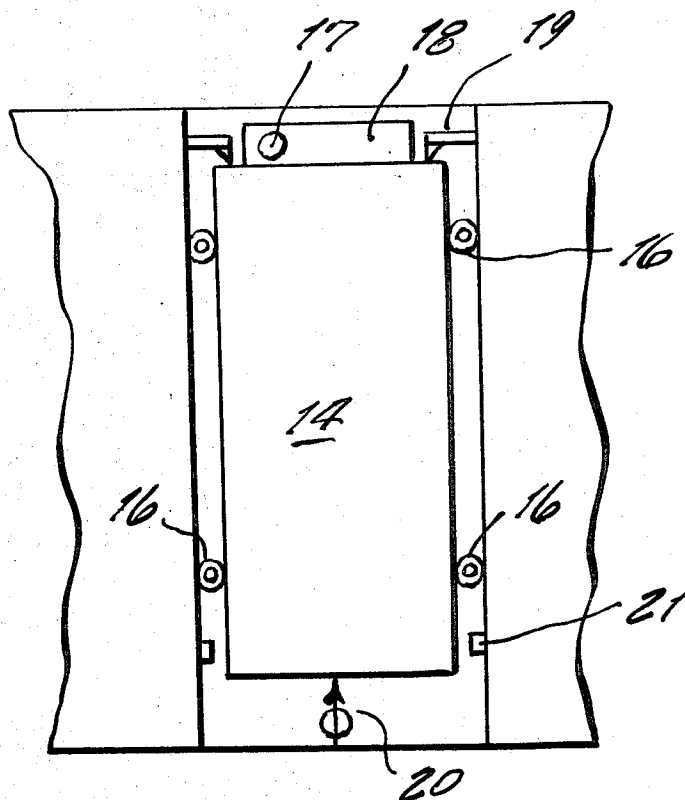
A system of loading and unloading a tanker vessel, the system including a plurality of containers each of which contains oil or other fluid, the containers being readily dropped into vertically extending chambers formed on the vessel.

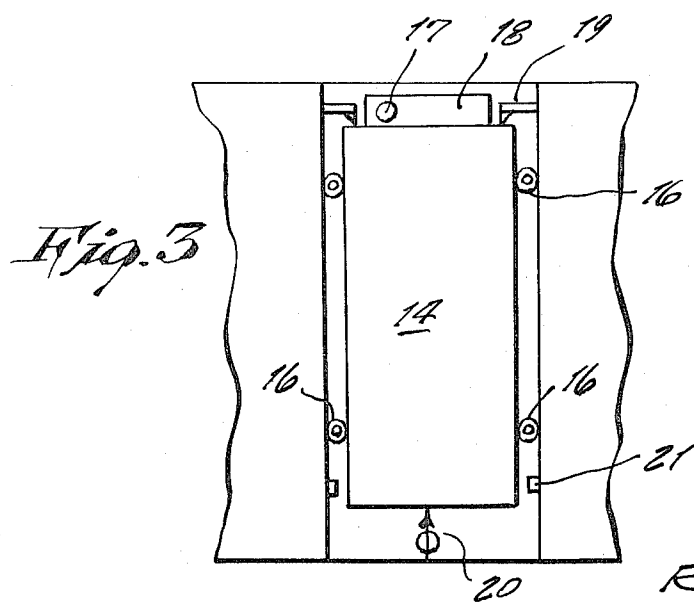
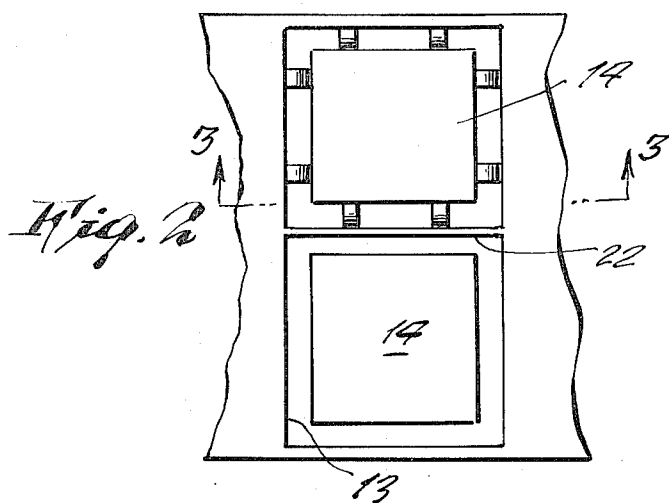
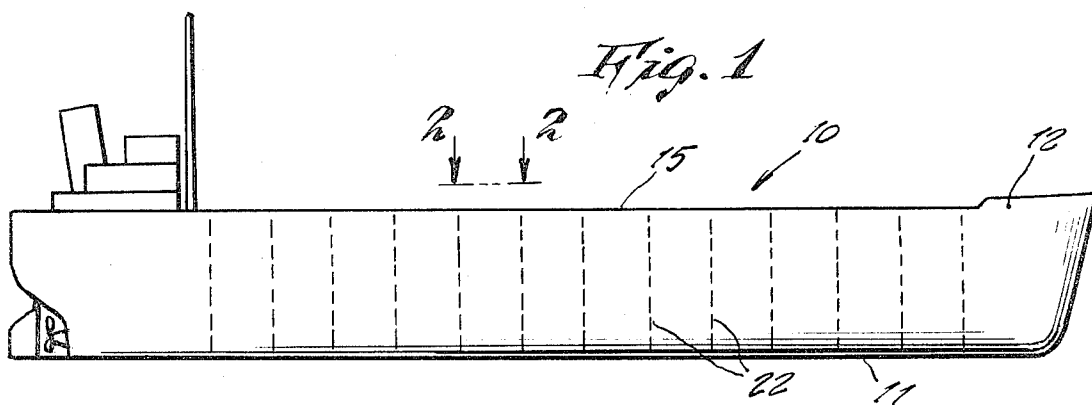
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1 Claim, 3 Drawing Figures





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SHIP FOR CONTAINERIZED CARGO

This invention relates generally to tanker vessels.

It is generally well known that the loading of oil upon a tanker vessel is a relatively slow operation in view that the oil must be piped through conduits leading to the holes of the vessel. Such operation may require several days in the case of a large cargo or tanker vessel, and it likewise requires a long time for pumping out the oil after the vessel has reached its destination. Such time consuming operations are expensive in view that the vessel is tied up and is unable to move towards its next port. This situation is of course objectionable and therefore in want of improvement.

Accordingly it is the principal object of the present invention to provide a containerized tanker wherein the oil is contained within large containers that are relatively quicker and easier to load upon a tanker ship as well as to remove therefrom, thus saving on time and loss of revenue while the ship is idle.

Another object of the present invention is to provide a containerized tanker wherein the ship is provided with vertical receptacles into which the oil filled containers can be quickly and readily placed or removed therefrom.

Other objects of the present invention are to provide a containerized tanker which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will become readily evident upon a study of the following specification together with the accompanying drawing wherein:

FIG. 1 is a side elevation view of a tanker ship, according to the present invention;

FIG. 2 is an enlarged fragmentary plan view thereof as viewed along line 2—2 of FIG. 1; and

FIG. 3 is a cross-sectional view taken on line 3—3 of FIG. 2.

Referring now to the drawing in detail, the reference numeral 10 represents a containerized tanker, according to the present invention, wherein there is a ship 11 for movement upon the high seas, the ship including a hull 12 having a major portion thereof divided into a plurality of vertically extending receptacles 13 and within which there may be removably placed containers 14 containing oil or the like. Each of the receptacles 13 comprises a vertically extending compartment that extends downwardly from the deck 15 of the ship and which can be normally either retained open or which may be closed by a hatch such as is well known in ship art.

As shown in FIG. 3 of the drawing, rollers or runners 16 may be employed around the sides of the oil tank container 14 so that the oil tank can be moved relatively friction free relative to the sides of the compartment 13. Upon the upper side of the oil tank container there may be positioned an air tank

17 and an inflatable raft 18. A plurality of latches 19 may be positioned at the upper end of the oil tank container so to secure the same within the compartment. Below the oil tank container there is positioned an ejection mechanism 20 as shown in FIG. 3. A water level sensor 21 for activating the ejection mechanism 20 is located within the compartment 13 near a lower end thereof.

It is to be noted that the latches 19 are controlled by structural failure and/or water level sensors 21. The air tank 17 and the inflatable raft 18 are likewise activated by the ejection mechanism.

As is further shown in FIGS. 1 and 2, it is to be noted that bulkheads 22 may be provided between the oil tank compartments so to separate them from each other in a leakproof manner.

It is to be further noted that another major purpose of the present invention is to provide a construction which will avoid the results of oil escapement in case of a ship break-up, due to heavy storms or grounding. It is well known that when a conventional oil tanker breaks up, the escaping oil flows out upon the surface of the sea and thus serious damage is done to shore installations and beaches with the oil debris that flows thereupon. Additionally such escaping oil destroys marine life as well as doing expensive damage at the shore. In the present invention, if such ship would break up in a storm, the oil tanks could be automatically ejected from the ship and the oil tanks could be recovered without the oil escaping therefrom, thus providing no damage and there being no loss of oil cargo.

What I now claim is:

1. In a containerized tanker, the combination of a vessel including a hull which is divided by means of vertical bulkheads into a plurality of compartments, each of said compartments removably receiving an oil tank container, each of said compartments comprising a vertically extending chamber provided with a plurality of runners or rollers along a side thereof for frictionally free movement of said oil tank container from said compartment, water level sensors being mounted upon the side wall of said compartment and positioned near a relatively lower portion thereof, the upper end of said oil tank container being normally retained by means of latches, and said water level sensors controlling said latches, an ejection mechanism being located at the bottom of said compartment and positioned beneath the bottom of said oil tank container, an air tank and an inflatable raft being positioned upon the upper end of said oil tank container, said air tank and inflatable raft being activated by said ejection mechanism; and said sensors having activating means that respond to the presence of water, said activating means communicating with release means of said latches, ejection mechanism, and said air tank for inflating said raft.

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