

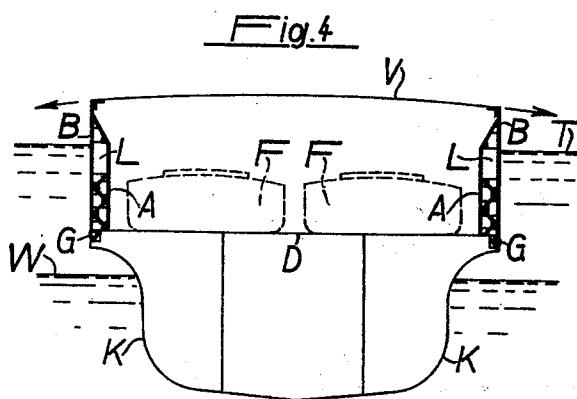
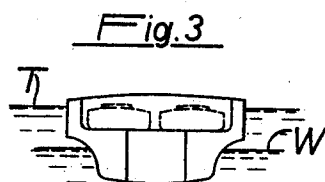
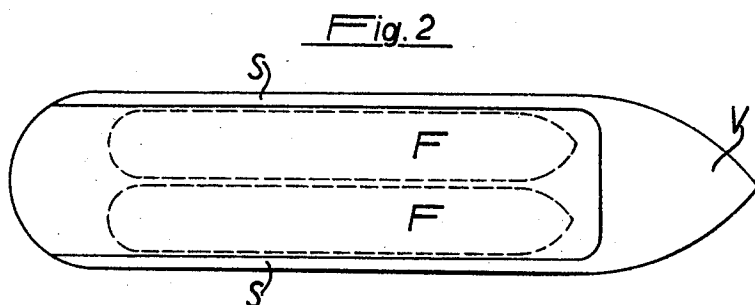
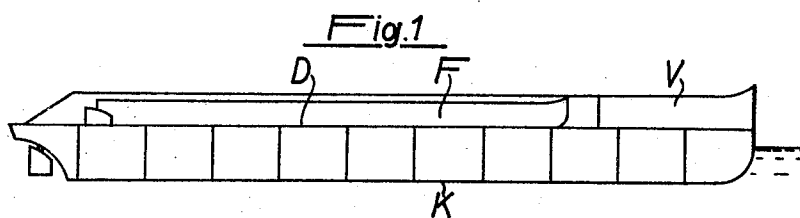
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DOCK SHIP FOR CONVEYING RIVER BOATS ACROSS THE SEA

Filed March 29, 1929



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## UNITED STATES PATENT OFFICE

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## DOCK SHIP FOR CONVEYING RIVER BOATS ACROSS THE SEA

Application filed March 29, 1929, Serial No. 350,897, and in Germany November 5, 1928.

This invention relates to a dock-ship for conveying river-boats across the sea.

Two types of dock-ships are already known, namely one type being provided with openings, which can be watertightly closed, for docking and undocking river boats whereby the same are disposed partly below the sea-level so that all sides must be closed watertightly, while in the second type of dock-ships the river-boats rest on a platform during the crossing of the sea, the said platform being arranged above the sea-level, but they are not protected against waves striking ship's sides.

This invention relates to a dock-ship in which the river boats or other floating vessels with flat bottom or hold rest on a platform above the sea-level, as in the construction last described, but have not to pass through an opening which would render necessary a watertight protection against waves striking the ship.

This object is attained according to the present invention in that side walls, protecting walls, bulwarks, stern-plankings or the like are provided, which protect the river boats against striking waves during the passage. In case the side walls are constructed in the manner of dock-walls, they also serve as means for stabilization of the dock-ship during the raising and lowering.

The side-walls may be removably or preferably rotatably connected with the hull of the dock-ship by means of joints, links, hinges or the like. In this event air compartments are preferably arranged in the side-walls and wholly or partly free the latter from load in case the vessel is immersed and thus facilitate the manipulation.

Two modes of carrying out the present invention are illustrated by way of example on the accompanying sheet of drawings in which—

Figs. 1, 2 and 3 show a dock-ship with fixed side-walls in sectional elevation, in plan view and in cross-sectional view respectively.

Fig. 4 is a cross-sectional view of a dock-ship provided with rotatable and if desired removable side-walls.

In the construction shown in Figs. 1, 2 and

3, the hull K of the vessel is raised or lowered by suitable devices in the manner of a floating dock and is provided with side walls S connected with the forepart V but leaves free the entrance from astern. The side walls S may be constructed in the manner of the walls of a floating dock and thus serve for stabilization of the ship during the raising and lowering. During the conveyance the river boats F rest on the platform D of the dock. W designates the water-level in the raised position of the dock-ship and T the water-level in the immersed or lowered position thereof.

In the construction shown in Fig. 4, the side- or board walls are pivotally attached to the hull K by means of hinges G and are provided at the outside with sheet metal walls B and further carry air compartments L. The side- or board walls can be turned outward in the direction of the arrows. V designates the forepart and D the platform of the dock on which rest the river-boats F during the conveyance. W designates the water-level in the raised position of the dock-ship and T the water-level in the lowered position thereof.

In this construction with rotatable and removable side- or board walls, the screws, wedges or the like, connecting the walls with the hull, are loosened before the sinking of the dock-ship, so that any manipulation below the water-level is rendered unnecessary.

In the case of a complete clearing of the platform, the side- or board walls will readily float in a corresponding low position of the platform of the dock and can be floated out of the way, in order to be replaced again in position after the admission of the river-boats or the like and to be fixed in the dry position after the docking operation is terminated.

In the case of a partial clearing only which can be of such an extent that a small floating action is present only, the side- or board walls are lowered at the side of the ship by means of suitable auxiliary means in such a manner that when the platform of the dock is disposed at a suitable depth, they give free access to the platform. This lowering is ef-

fectured about the hinges, links or joint arranged at the border of the platform.

5 The side walls, protecting walls, bulwarks, stern-plankings or the like can be constructed in such a manner and connected with the hull in such a way, that they take up a part of the tensions and stresses to which the hull is subjected.

10 The river boats enter the dock-ship if the latter is in the lowered position and subsequently are raised in the manner of a floating dock. Now they are conveyed to the place of destination and are again undocked.

I claim—

15 1. In a dock ship for conveying river boats across the sea, the combination of a dock platform arranged above the water level with walls provided at the board sides of the ship, air compartments arranged in said walls, and  
20 means pivotally connecting the said walls with the hull of the dock ship.

2. In a dock ship for conveying river boats across the sea, the combination of a dock platform arranged above the water level,  
25 walls hingedly connected to the board sides of the ship and capable of rigid upright position as protection from lateral wash and of being dropped over the sides to free the platform.

30 3. A dock ship, as claimed in claim 1, in which the platform projects beyond the sides of the hull to increase the carrying space thereof.

35 4. A dock ship as claimed in claim 2, in which the platform projects beyond the sides of the hull to increase the carrying space thereof.

In testimony whereof I affix my signature.

OTTO POPPER.

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