

DESCRIPTION

The invention relates to an oil collecting ship with two body halves directly interconnected by a hinge, oil suction means which take up the oil brought together by the ship body halves in the opened-out state, a locking means keeping the body halves parallel to the longitudinal axis of the ship in the non-opened-out, closed state, and propulsion means for propelling and manoeuvring the ship both in the closed and in the opened-out state, the superstructure largely being located on one body half.

DE-C-27 44 517 discloses an oil collecting ship of this type, in which the two body halves are directly interconnected by a joint provided on the stern, the locking means being provided on the forecastle end bulkhead. The joint is constructed in the form of a hinge with corresponding hinge pins.

Fundamentally the known oil collecting ship has proved to be completely satisfactory. However, it has proved to be desirable, particularly when constructing larger units, to improve the force transfer between the body halves. It must be borne in mind that in the case of relatively large units and with relatively high seas, in the opened-out state the body halves perform considerable relative movements leading to considerable forces in the hinge area.

The problem of the invention is to so further develop the known oil collecting ship that the force transfer in the hinge area is improved.

According to the invention this problem is solved in that the ship body half having the superstructure engages over the other body half over substantially its entire width in the hinge area above a substantially horizontal dividing plane and that the two body halves in the dividing plane have facing horizontal hinge surfaces extending over substantially the

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entire width of the particular body half in the hinge area.

The hinge surface of one body half can be substantially shaped like a circular disk, whose diameter is substantially the same as the entire beam of the ship.

The invention also proposes that the hinge be provided on the bow of the ship in the vicinity of the forecastle and bulkhead.

According to the invention the bow of the ship can be shaped substantially in accordance with the circular shape of the hinge area.

The invention also proposes that as the sole propulsion means, a manoeuvring propeller or the like is provided on the stern of each body half.

Finally, it is also possible to provide in the forepart of the ship an additional manoeuvring drive (jet or the like).

As a result of the inventive measure of providing a "flat" hinge, a considerably improved force transfer in the hinge area is ensured, because the forces between the two body halves are not solely transferred by the hinge pins and for this purpose there is instead the flat contact between the hinge surfaces of the two body halves, which leads to much more favourable leverage conditions in the hinge area. The inventively provided hinge can be positioned with particular advantage on the bow of the ship, so that the bow can be given a flow-favourable shape, which is closed apart from the dividing plane. This construction also offers the further advantage that for manoeuvring the ship both in the closed and the opened-out state, a manoeuvring propeller or the like on the stern of each body half is sufficient as a propulsion means, so that there is no need to provide secondary propulsion means, as is the case in the prior art. The locking means in the

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case of this construction is naturally preferably located in the vicinity of the stern.

The inventively provided oil collecting ship can also be used in the same way for transportation purposes, particularly as an oil rig tender or the like, as is the case with the oil collecting ship according to German patent 27 44 517 and reference should be made to the latter concerning the further auxiliary means of the ship and the like.

Further features and advantages of the invention can be gathered from the following description of an embodiment and the attached drawings, wherein show:

- Fig. 1 An embodiment of an oil collecting ship according to the invention in side view.
- Fig. 2 The oil collecting ship of fig. 1 in plan view.
- Fig. 3 The oil collecting ship shown in the closed state in figs. 1 and 2 in this case in the opened-out state.

As can be gathered from the drawings, the represented embodiment of the inventive oil collecting ship has a first body half 12 essentially carrying the entire superstructure 10 and a second body half 13. In a hinge area 14 located on the bow of the ship, body half 12, in the manner shown in the drawing, engages over the entire width of body half 13, which carries no superstructure and namely over the beam of the ship defined by the width of both halves 12, 13. In a horizontally arranged dividing plane 16, the two body halves have facing hinge surfaces 18, 20, which in the case of the superstructure-carrying body half 12 is substantially shaped like a circular surface, whose diameter is the same as the entire beam of the ship. As can be gathered from figs. 1 and 2, apart from the horizontal dividing plane 16, the bow of the ship is substantially closed-circular, the bow shape being

essentially defined by the shape of hinge area 14.

Fig. 1 also shows that a manoeuvring propeller 22 is provided at the end of each body half. When the ship is travelling normally, i.e. both body halves are locked together by a not shown locking means, the two manoeuvring propellers 22 serve for the propulsion and manoeuvring of the ship. The manoeuvring propellers also drive and maneuver the ship in the oil collecting position shown in fig. 3 and in which the two halves are opened out by approximately 65° with respect to one another. An additional manoeuvring drive 23 in the form of a jet or the like is also provided in the forepart.

The described oil collecting ship embodiment can in the closed state be used for general transportation purposes, particularly for oil rig tendering, but also as a diving base ship and as a buoy-laying ship (due to the excellent stability and the capacity to move to leeward in the opened-out state). The oil collecting means, including the necessary storage tanks obviously provided in both body halves ensure, if necessary, the usability as an oil collecting ship and for further details thereon reference should be made to DE-C-27 44 517.