

SPECIFICATION

A derrick crane

- 5 The invention relates to a derrick crane with a double hoist facility, for example for a cargo ship with twin derricks.

It has been previously proposed to provide a single-hoist derrick with a pivotal end-jib (see for example German AS 10 43 129) but movement of the jib in the vertical plane is always associated with the movement of the derrick boom in this plane, in order that the load suspended from the jib is moved in the same horizontal plane independently of the radius of action.

Our German application P 28 11 348.0-22 should also be mentioned, which relates to a rigid i.e. stationary, derrick extension. This jib is limited in its capacity in that it is of a positively cantilever type. Also, it cannot be adjusted in its inclination independently of the derrick.

According to the present invention there is provided a derrick crane comprising a derrick boom pivotally movable through a vertical plane between two working positions and having primary lifting tackle, and an independently derricking jib pivotally mounted at the outer end of the derrick boom, said jib having two ends each of which has a respective auxiliary lifting tackle which is attachable to the lower end of the derrick boom to serve as derricking tackle when the other lifting tackle is to be used for supporting a load.

In the crane of the invention auxiliary tackle is located respectively at each end of the jib and, according to the working area selected, one of the tackles can be fixed to the bottom of the derrick for adjusting the jib, whereas the other tackle serves to receive the load.

Due to this, the swinging movement of the derrick is considerably facilitated as regards handling of the auxiliary loading tackle without hindering the mobility of the jib.

It is preferred that the pivotal mounting of the jib onto the boom is at the centre of the jib. It is however possible for the jib pivot point to be away from the jib centre, in which case the auxiliary loading tackle is able to handle greater loads at one of the working regions than the other.

Preferably the derrick boom is pivotally supported between two support uprights.

The invention will be described hereafter with reference to one example illustrated in the drawings:

Figure 1 shows a derrick crane according to the invention with a movable head jib and two tackles in side view, i.e. seen in the direction of the plane of the uprights and in one position of the derrick above a hatch on the left-hand side which is not shown and

Figure 2 shows a derrick crane, as in figure 1, but in a position of the derrick above a hatch to be imagined on the right-hand side of the plane of the uprights.

As shown in figures 1 and 2, a triangular head jib 3 is mounted by a pivot 4 above the suspension point of the main loading tackle 7 at the upper end of the derrick boom 1, which is held and moved by two

derricking tackles 2, 2'. Tackles 5, 6 are located one at each end of the jib 3 (on the left and right-hand side in the drawings). When the derrick boom 1 works to the left of the crane post (as viewed from the right in Fig. 1) the right-hand tackle 5 of the head jib 3 is fixed to the foot of the boom at eye 8, the left-hand tackle 6 then serving for receiving the load.

Each of the tackles 5, 6 can be operated by a respective winch drum. By means of the right-hand tackle 5, the jib 3 can now be adjusted in inclination and hence radius even when under load. For swinging the boom 1 through the plane of the uprights in order to work to the right of the crane post (as viewed from the left in Fig. 2), the free tackle, in this case the right-hand tackle 5, is released from the eye 8 at the bottom of the boom (Fig. 2) and can receive loads. The jib 3 can now be adjusted by the left-hand tackle 6 which is fixed to the eye 9, as shown in figure 2.

Figure 1 shows the derrick boom 1 with head jib 3 in the left-hand working region. The right-hand tackle 5 is attached to the bottom of the derrick boom at eye 8, the left-hand tackle 6 is available for the load.

CLAIMS

1. A derrick crane comprising a derrick boom pivotally movable through a vertical plane between two working positions and having primary lifting tackle, and an independently derricking jib pivotally mounted at the outer end of the derrick boom, said jib having two ends each of which has a respective auxiliary lifting tackle which is attachable to the lower end of the derrick boom to serve as derricking tackle when the other lifting tackle is to be used for supporting a load.

2. A derrick crane as claimed in claim 1 wherein the pivotal mounting of the jib onto the derrick is at the centre of the jib.

3. A derrick crane as claimed in claim 1 or 2 wherein the boom is pivotally supported between two support uprights.

4. A derrick crane substantially as hereinbefore described with reference to the accompanying drawings.

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