

## ARRANGEMENT FOR LOWERING CRANKHEAD BEARINGS

The reciprocating main engines fitted in the undermentioned ships are generally similar in design and were provided by the makers with special gear for raising and lowering the bottom halves of the crankhead bearings. The ships concerned are :—

*River, Loch, Bay and Castle Class Frigates*

*H.M.S. Woodbridge Haven*

*Despatch Vessels H.M.S. Alert and Surprise*

*Surveying Vessels H.M.S. Cook, Dalrymple, Dampier and Owen*

All Vessels of L.S.T.(3) type.

The lowering gear provided by the makers comprised special eyebolts, shackles and chains, all designed to pass through the nuts of the crankhead bearing bolts. The special eyebolts screw into the top end of the bearing bolts, and the chains are led from the eyebolts to two small rope or chain blocks suspended from lifting lugs on the bottom of the cylinder, or from the gantry fitted above the main engine. There is thus a separate lowering arrangement for each side of the bearing.

### Improved Arrangement

An improved arrangement was devised by C.E.R.A. M. S. Beech for which he has been awarded the sum of £20 from the Herbert Lott Naval Trust Fund.

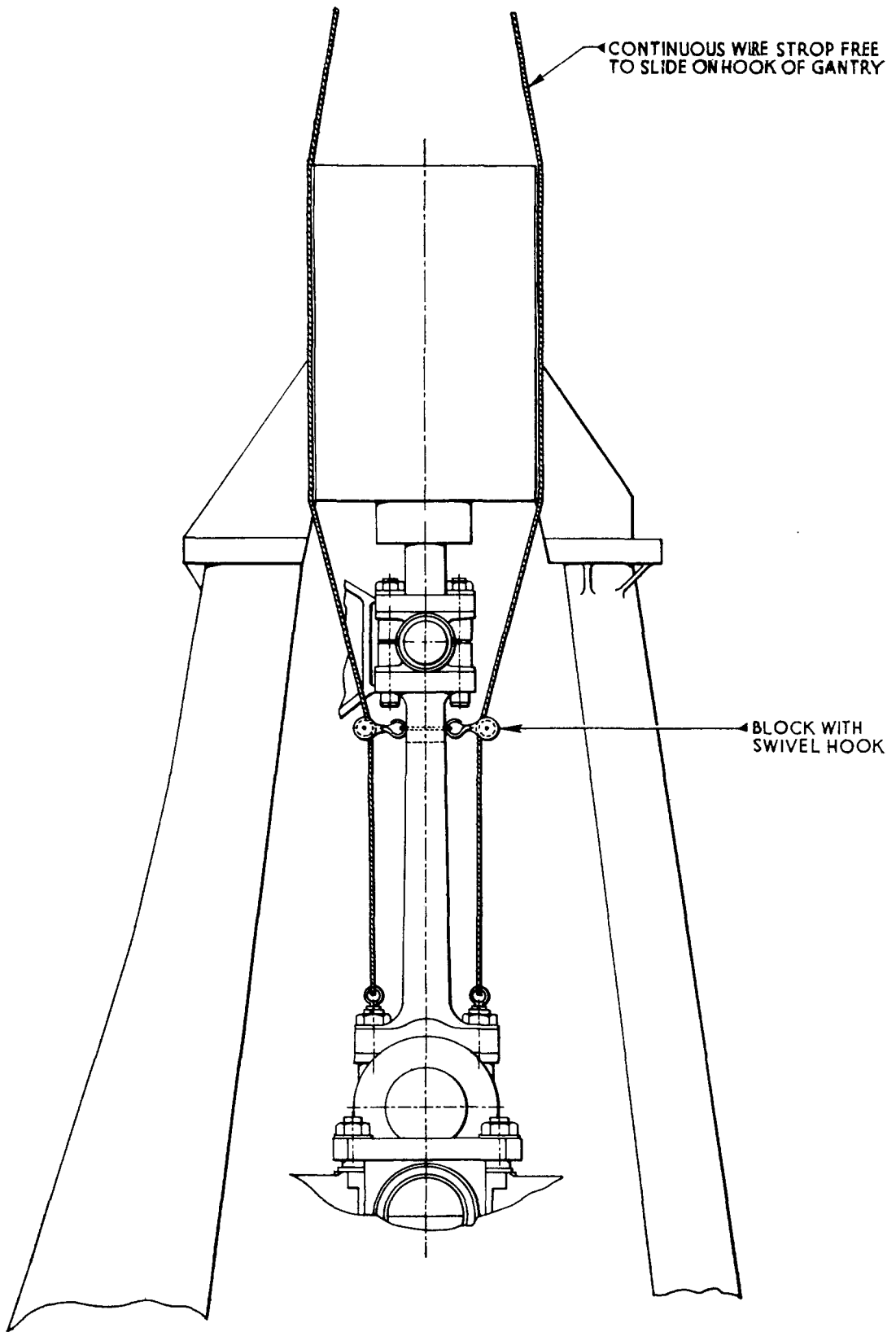
The arrangement is illustrated in the accompanying diagram. The same special eyebolts are used as before, but two rope blocks with swivel hooks, Patt. 398B, are hooked together through the fork of the connecting rod. A continuous wire strop is led from one eyebolt through the rope block above, up over the hook of the main engine gantry chain block and down the other side of the engine, passing through the other rope block to the eyebolt on the opposite side of the bearing.

The main engine gantry block is used for lowering and raising the rope blocks Patt. 398B acting as jockey guide pulleys for the strop.

The advantages of this arrangement are :—

- (a) Only one man is needed for lowering and raising, whereas with the designed arrangement two men are required, one on each side.
- (b) The two sides are lowered squarely and evenly.

These advantages reduce the time and labour required to examine and adjust the bearings.



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