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J READHEAD & SONS L<sup>o</sup>

N<sup>o</sup> 515

MIDSHIP SECTION

(SEE AMENDED)

*S.S. Thornliebank*

NEWCASTLE ON TYNE.

Report No. 97322.

W130-0072



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Lloyd's Register  
Foundation



19 JAN 1939

# NUMERALS.

"D" FOR NUMERALS = 37.08, FOR PROPORTION = 37.83  
 D = 37.08 56.50  
 L = 4.25 37.08  
 15760. BRIT N° 93.58  
 4.25 39771. SECOND N°  
 $\frac{L}{D} = \frac{4.25}{37.83} = 11.23$  "a" = 24.92

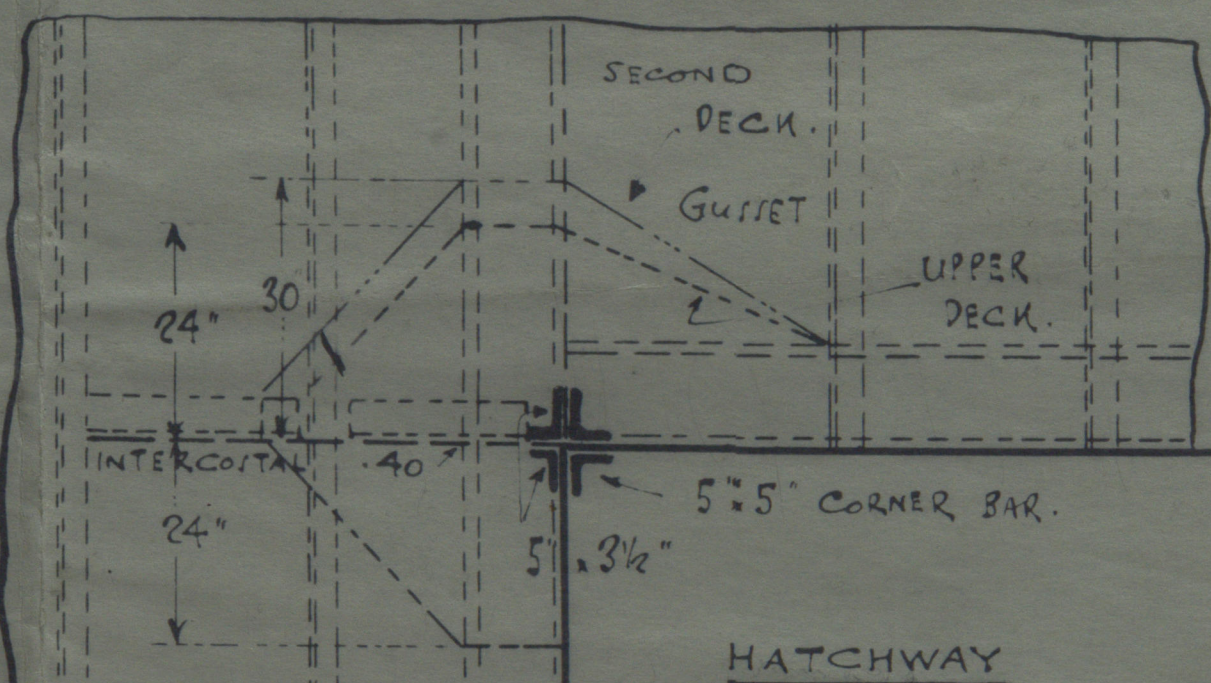
## EQUIPMENT N° 40326 (LETTER "A")

3 BOWER ANCHORS (STOCKED) 2 = 22.50 COLL WEIGHT: 1044.5 LBS  
 1 STEAM ANCHOR 20 LBS (IN STOCK) 12.00  
 270 FMS. 2" DIA. STEEL WIRE CABLE 100.00  
 90 FMS. 5" STEEL WIRE CABLE (612 F.W.R.) 100.00  
 100 FMS. 4" STEEL WIRE CABLE (612 F.W.R.) 100.00  
 750 HAWKERS & WARPS AT PER RULE.

## COMPUTATION OF EQUIPMENT N°

SECOND N° (CONTINUED) = 39771  
 FORECASTLE (37.15) = 200  
 FALCON MOUNT (28.15) = 100  
 BOW MOUNT (61.25) = 238  
 40326.

## DETAIL OF GUSSET AT BOTH DECK.



## N° 515.

### MIDSHIP SECTION.

DIMENSIONS AS PER RULE.

LENGTH B.R. 425.00'  
 BREADTH MLD. 56.50'  
 DEPTH MLD. 37.83'

CLASS 100 A.1. "WITH FREEBOARD."

JOHN READHEAD & SONS LTD  
 SHIPBUILDERS, ENGINEERS &c.  
 SOUTH SHIELDS.

## UPPER DECK.

DECK PLATING 5/16" TO 3/8" OUTSIDE LINE OF HATCHWAYS. 40" TO 36" WITHIN LINE.  
 OVERLAPPED BUTTS, TREBLE RIVETED FOR 1/2 LEN. DOUBLE TO SINGLE AT ENDS.  
 DECK COMPLETELY HEATED WITH 5" x 3" OREGON PINE.

BEAMS 9" x 3/4" x 58" N.B.S. ON EVERY FRAME.

HATCH END BEAMS - SEE DETAIL SKETCH.

## SECOND DECK.

DECK PLATING 5/16" TO 3/8" OUTSIDE LINE OF HATCHWAYS. 34" TO 31" WITHIN LINE.  
 OVERLAPPED BUTTS, DOUBLE RIVETED FOR 1/2 LEN. SINGLE AT ENDS.

BEAMS 11" x 3/4" x 58" N.B.S. ON EVERY FRAME.

HATCH END BEAMS - SEE DETAIL SKETCH.

## FRAMES.

SPACED 24" APART CENTRES FROM 1 TO 14 & FROM 166 TO 170.  
 30" " " " 15 TO 165.  
 27" " " " 166 TO 169.

N° 15-43, 45-69, 71-79, 93-101 & 103-180 INCL. ARE 10" x 3/4" x 58" N.B.S. 131-148 - SEE "PROFILE".  
 N° 81-89 & 91 INCL. (IN WAY OF BOILERS) ARE OF 12" x 3/4" x 58" N.B.S.

IN PAINTING AREA N° 149-165 AS SHOWN ON "PROFILE & DECK PLAN".  
 ALL EXTENDING TO SECOND DECK ON EVERY FRAME.

MAIN FRAMES TO EXTEND TO UPPER DECK IN WAY OF HATCH ENDS & MACHINERY SPACE AT SHOWN ON PROFILE.

TWEEN DECK: BETWEEN 1/2 LEN. FROM AFT & 1/2 LEN. FROM FORD (i.e. 25-139) TO BE ON ALTERNATE FRAMES ONLY, OF 7" x 3/4" x 42" N.B.S. SCARFED 18" ONTO MAIN FRAMES & EXTENDED TO UPPER DECK. TO BE OF 7" x 3/4" x 48" N.B.S. ON ALTERNATE FRAMES BETWEEN N° 70 & 92 (IN WAY OF PERMANENT BULKHEADS). FORD OF 1/2 LEN. FROM THE ITEM (140-169) FRAMES ARE OF 7" x 3/4" x 42" N.B.S. (WITH INTERMEDIATE FRAMES OF 8" x 3/4" x 40") SCARFED 18" ONTO MAIN FRAMES & EXTENDED TO UPPER DECK. FORD OF 1/2 LEN. FROM THE ITEM (140-169) FRAMES ARE OF 7" x 3/4" x 42" N.B.S. & INTERMEDIATE FRAMES OF 8" x 3/4" x 40" SCARFED 18" ONTO MAIN FRAMES & EXTENDED TO UPPER DECK.

PEAKS: N° 1-13 & 166-170, INCL. OF 7" x 3/4" x 42" N.B.S. ON EVERY FRAME. IN THE AFTER PEAK MAIN FRAMES EXTEND TO THE UPPER DECK ON EVERY FRAME. IN THE FORD PEAK THE MAIN FRAMES EXTEND TO THE FIDDLE DECK ON EVERY FRAME.

BOTTOM FRAMES ON SOLID FLOORS: BETWEEN 1/2 LEN. FORD & COLLISION AND (121-165 INCL.) SINGLE ANGLE 5" x 5" x 1/2" WITH TWO ROWS OF RIVETS IN EACH FLANGE. AT BRACKET FLOOR N° 131-132-134-135-137-138 A 3" x 3/4" x 44" BACK BAR FITTED TO BOTTOM FRAME THUS J.

DOUBLE REVERSE FRAMES: TO BE FITTED TO FLOORS UNDER THE ENGINE FEATING, UNDER BOILER BEAKERS & ALSO UNDER THRUST FEATING, EXTENDING TO THE GIRDER OUTSIDE THE ENGINE FEATING. ALTERNATIVELY, A SINGLE ANGLE 5" x 5" x 1/2" DOUBLE RIVETED.

## FLOORS.

39" (20" WIDE) x 48" (25" DEEP) x 1/2" (25" TANK ENDS)

ON EVERY THIRD FRAME, EXCEPT IN ENGINE SPACE, UNDER BOILER BEAKERS, & FORD OF 1/2 LEN. FORD, WHERE THEY ARE ON EVERY FRAME.

PARTIAL FLOORS: FITTED UNDER THRUST FEATING, TANK END FLOORS STIFFENED BY ANGLES 6" x 3/4" x 30" MANT.

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"L" 51" x 69" x 48"

"K" 58" x 63" x 48"  
 (51" x 65" RULE)

"J" 87" x 61" x 47"

"H" 86 1/2" x 61" x 47"

"G" 87" x 61" x 47"

"F" 86 1/2" x 61" x 47"

"E" 86 1/2" x 61" x 47"

"D" 73 1/2" x 61" x 50"

"C" 74" x 61" x 50"

"B" 73 1/2" x 61" x 50"

"A" 74" x 61" x 50"

PLAN OF GUSSET AT EVERY FRAME.

ALTERNATIVE WELDED CONNECTION.

PROPELLER BOSS PLATE - 71

INSIDE LUG: 3" x 3/4" x 48" (25" DEEP) SINGLE ALL FORD & AFT, WITH 9" x 7/8" RIVETS IN EACH FLANGE, IN WAY OF PAINTING FRAMES TO BE 6" x 6" x 48" SINGLE, WITH 18" x 3/4" RIVETS IN EACH FLANGE, AND 18" x 3/4" RIVETS ON EVERY FRAME, ALL FORD & AFT OF 6" x 3/4" x 40" (50" DEEP) WITH 5" x 7/8" RIVETS EACH WAY AS SHOWN. IN WAY OF PAINTING FRAMES, CUT FROM 12" x 3/4" x 50" C WITH 8" x 7/8" RIVETS TO MARGIN AND BRACKETS.

X Side and Bottom shell may be reduced .51" at 30" frame spacing.

## FORECASTLE DECK.

DECK PLATING 3/4" (28" WIDE HEATED) END LAP SINGLE RIVETED.

BEAMS ON EVERY FRAME AT PER DECK PLAN.

KNEEL 24" x 15" x 46" WITH 5" x 7/8" RIVETS IN EACH ARM.

FOUR PLATING 48" END LAP SINGLE RIVETED.

OVERLAPPED BUTTS, TREBLE RIVETED FOR 1/2 LEN. DOUBLE AT ENDS (WHERE NOT NECESSARY 48")

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## STRONGER PLATE

35" x 36"

END LAP SINGLE RIVETED

2 1/2" x 3/4" x 26"

FOUR PLATING 48"

END LAP SINGLE RIVETED

OVERLAPPED BUTTS, TREBLE RIVETED FOR 1/2 LEN. DOUBLE AT ENDS (WHERE NOT NECESSARY 48")

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