

# MARINE ENGINES N° 1837.

MESSRS. RICHARDSON, DUCK & CO'S S. N° 650.

TOP MANHOLE STIFFENING PLATE 1/4" THICK

PIVET HOLES 1/8" DIA.

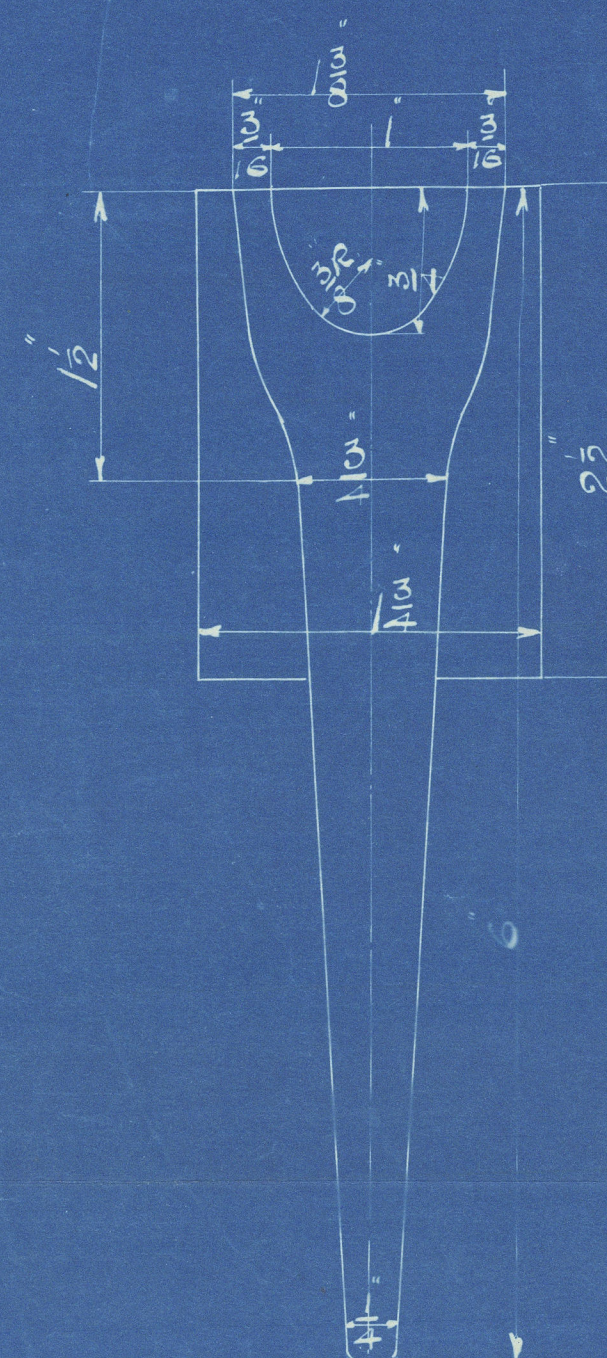
STEEL STAYS 3/8" EX. DIA. SCREWED 6 THREADS

STEEL STAYS 1/4" EX. DIA. SCREWED 8 THREADS

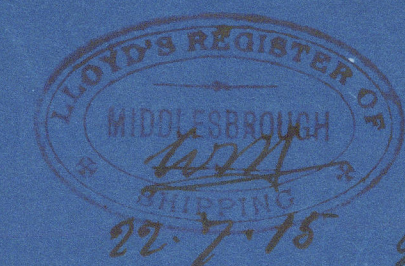
STAY TUBES 5 ARE 5/16" THICK SCREWED 3/4" DIA. INTO BACK TUBE PLATES & " " S.S. " 3/8" " " 3/8" " " FRONT " " 9 THREADS PER INCH. PLAIN TUBES ARE 8 W.G. THICK, SWELLED 1/2" AT FRONT END.

SECTION OF FIRE-BAR.

FULL SIZE.



FOR DETAIL OF FURNACE FRONTS SEE STANDARD DRAWING TR N° 50674 N° 1837.



Duplicate of boiler No 1725 fitted in S.S. Indianola Mdt Mpt No 7200

SMOKE BOX DOORS CLOSELY FITTED & SOOT DOORS FITTED AT BOTTOM OF UPTAKES.

RETARDERS FITTED IN THE MAIN BOILER TUBES EXCLUSIVE OF THE FIVE BOTTOM ROWS IN THE CENTRE BOXES & THREE BOTTOM ROWS IN WING BOXES.

SCREEN FITTED BETWEEN FIRST JOIST OF BOILER ENDS, SAY 24" AWAY AND CARRIED DOWN TO TANK TOP TO FORM A TIGHT DIVISION BETWEEN ENGINES & BOILERS. BOILERS COVERED WITH HAAKE'S NON CONDUCTING COMPOSITION & LAGGED WITH SHEET IRON ON CIRCULAR PARTS & BACK OF BOILERS.

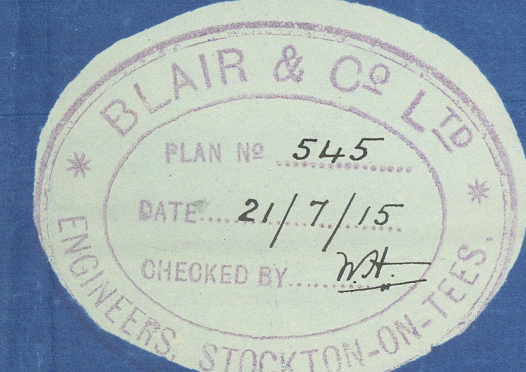
## BOILERS 3 OFF SCALE 1 INCH TO A FOOT

180 LBS. WORKING PRESSURE.

TOTAL HEATING SURFACE IN THREE BOILERS = 6851 SQ. FEET.

" GRATE " " " = 193 " " (5.8 BARS)

THE MINIMUM TENSILE STRENGTH OF SHELL & GIRDER PLATES IS TAKEN AT 28 TONS PER SQ. INCH



B 2624

STEEL SCREW STAYS MARKED 'A' ARE 2 1/2" EX. DIA. SCREWED 8 THREADS. THUS: 2 " 1 STAYS MARKED 'A' ARE OMITTED. OTHER " " ARE 1 3/4" EX. DIA.




W872-00081/2

**From BLAIR & CO., Ltd.,**  
**STOCKTON-on-TEES.**

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**For Enclosure to**

*Messrs Lloyds  
Registry of Shipping  
Middlesbro*



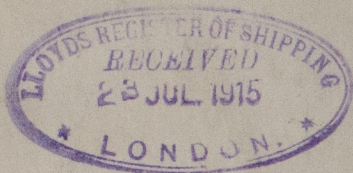


32 Main Boilers  
Messrs Blair & Co Ltd  
No 1837

for

Messrs Richardson Duck & Co  
S.S. No 650

Working Press 180 lbs.



|              |      |
|--------------|------|
| No.          | 5687 |
| LLOYD'S TEST |      |
| 360 lbs.     |      |
| 26-9-16      | T.M. |

S.S. IKEDA

Indb. Rpt. No 9686

RETAIN

Supplement of No 1725  
fitted in S.S. Indianapolis  
Indb Rpt. No 7200

W872-0008 2/2



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Lloyd's Register  
Foundation