

Rpt. 5a.

hull Rpt. No. 26413.

REPORT ON BOILERS.

No. 7852.

WED. APR. 9 - 1913

Received at London Office

Date of writing Report 8.4.13 1913 When handed in at Local Office 8.4.13 1913 Port of MIDDLESBROUGH ON TEES

No. in Survey held at Stockton-on-Tees Date, First Survey 20th Dec 1912 Last Survey 2nd April 1913

Reg. Book. on the (Number of Visits 16) (No 228) Tons } Gross } Net

Master Built at Beverley By whom built H. Scarr When built

Engines made at Luton By whom made Vauxhall & W. Hydraulic Eng. Co Ltd When made

Boilers made at Stockton By whom made Messrs Riley Bros Ltd (No 4504) When made 1913

Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Sons

(Letter for record (S)) Total Heating Surface of Boilers 711.5 sq ft Is forced draft fitted No. and Description of Boilers One single ended Working Pressure 140 Tested by hydraulic pressure to 280 Date of test 2.4.13

No. of Certificate 5048 Can each boiler be worked separately Area of fire grate in each boiler 26.4 sq ft No. and Description of safety valves to each boiler

Are they fitted with easing gear In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork Inside dia. of boilers 9'-0" Length 9'-1 1/4"

Material of shell plates steel Thickness 5/8" Range of tensile strength 29-33 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams 2 Riv lap long. seams 2 B-2 Riv Diameter of rivet holes in long. seams 15/16 Pitch of rivets 5 1/2"

Lap of plates or width of butt straps 9 x 5/8 Per centages of strength of longitudinal joint rivets 89.1 Working pressure of shell by rules 140 Size of manhole in shell 19 x 15 Size of compensating ring 7 x 7/8 No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 33 Length of plain part top 78" Thickness of plates crown 5/8" bottom 102" bottom 5/8" Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 143 Combustion chamber plates: Material steel Thickness: Sides 3/8" Back 3/8" Top 3/8" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/2 x 7" Back 8 5/8 x 8" Top 9 1/2 x 7" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 158 Material of stays steel Diameter at smallest part 1.45 Area supported by each stay 69 Working pressure by rules 168 End plates in steam space: Material steel Thickness 7/8" Pitch of stays 15 1/4" How are stays secured nuts & washers Working pressure by rules 140 Material of stays steel Diameter at smallest part 3.67 Area supported by each stay 257.5 Working pressure by rules 148 Material of Front plates at bottom steel Thickness 7/8" Material of Lower back plate steel Thickness 7/8" Greatest pitch of stays 13 1/2 x 8" Working pressure of plate by rules 215 Diameter of tubes 3" Pitch of tubes 4 5/8 x 4" Material of tube plates steel Thickness: Front 7/8" Back 5/8" Mean pitch of stays 9 1/2" Pitch across wide water spaces 13 1/2" Working pressures by rules 150 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 x 1 1/4" Length as per rule 22" Distance apart 9 1/2" Number and pitch of Stays in each 2 @ 7" Working pressure by rules 153 Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

FOR RILEY CROSS BOLLMAKERS LIMITED. The foregoing is a correct description. J. K. M. Manufacturer. SECRETARY

Dates of Survey } During progress of work in shops - - } 1912, Dec. 20, 23, 30. 1913, Jan. 8, 14, 25. Feb. 12. Is the approved plan of boiler forwarded herewith yes } While building } During erection on board vessel - - } 18, 27. March. 5, 12, 14, 17, 20, 28, April 2. Total No. of visits 16.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey, is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results

MONTHLY A/c Survey Fee ... £ 2-7-0 When applied for, 191 Travelling Expenses (if any) £ : : When received, 191 W. Morrison Engineer Surveyor to Lloyd's Register of British and Foreign Shipping. COMMITTEE'S MINUTE FRI. JUL. 4 - 1913 ASSIGNED See minute on L.R. 75607 Lloyd's Register Foundation W1343-0163