

REPORT ON BOILERS

No. 25397

Received at London Office

TUE. SEP. 3-1912

Date of writing Report 19 When handed in at Local Office 2.9.12 Port of SUNDERLAND.

No. in Survey held at SUNDERLAND. Date, First Survey 4 July Last Survey 20 Aug 1912

Reg. Book. on the S.S. Finchley. (Number of Visits 6) Gross Tons 4174 Net Tons 2560

Master McKechnie Built at S.L.A. By whom built J. Dickenson & Sons Ltd When built 1912

Engines made at S. Land By whom made J. Dickenson & Sons Ltd when made 1912

Boilers made at " By whom made do when made 1912

Registered Horse Power 350 Owners Britain S.S. Co. Ltd (Walls Wallers Ltd) Belonging to London

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel J. Spence & Sons Ltd

(Letter for record S.) Total Heating Surface of Boilers 877 sq ft Is forced draft fitted - No. and Description of Boilers Marine type Working Pressure 90 lbs Tested by hydraulic pressure to 180 Date of test 26.7.12

No. of Certificate 3031 Can each boiler be worked separately ✓ Area of fire grate in each boiler 23 sq ft No. and Description of safety valves to each boiler two Spring Area of each valve 4.9 Pressure to which they are adjusted 83 lbs

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 10' 6" Length 10 ft

Material of shell plates S Thickness 19/32 Range of tensile strength 28-32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams S.R. lap long. seams L.R. lap Diameter of rivet holes in long. seams 5/16 Pitch of rivets 3 1/8

Lap of plates width of butt straps 6" Per centages of strength of longitudinal joint rivets 80.39 Working pressure of shell by rules 91 1/2 lbs Size of manhole in shell 16" x 12" Size of compensating ring 7 1/8" x 19/32" No. and Description of Furnaces in each boiler two plain Material S Outside diameter 3 ft Length of plain part top 6' 2" Thickness of plates crown 5/8" bottom 2"

Description of longitudinal joint L.R. St. No. of strengthening rings Working pressure of furnace by the rules 92 1/2 Combustion chamber plates: Material S Thickness: Sides 5/8 Back 19/32 Top 5/8 Bottom 11/16 Pitch of stays to ditto: Sides 12 x 11 Back 11 x 11 1/2

Top 7 1/2" x 12" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 96 Material of stays S Diameter at smallest part 3/8" Area supported by each stay 126 1/2 Working pressure by rules 91 1/2 End plates in steam space: Material S Thickness 2 1/32"

Pitch of stays 15 1/4 How are stays secured nuts Working pressure by rules 94 1/2 Material of stays S Diameter at smallest part 1.6"

Area supported by each stay 251 1/2 Working pressure by rules 98 Material of Front plates at bottom S Thickness 11/16 Material of Lower back plate S Thickness 19/32 Greatest pitch of stays 12 3/8 x 11" Working pressure of plate by rules 90 Diameter of tubes 3 1/4"

Pitch of tubes 4 3/4 x 4 1/2 Material of tube plates S Thickness: Front 11/16 Back 11/16 Mean pitch of stays 14 1/4 x 11 1/8 Pitch across wide water spaces 1 1/4 Working pressures by rules 97 1/2 Girders to Chamber tops: Material S Depth and thickness of girder at centre 5 3/4 x 1 1/4 Length as per rule 2' 3 5/16 Distance apart 7 1/2 Number and pitch of Stays in each one 12"

Working pressure by rules 94 Superheater or Steam chest: how connected to boiler ✓ 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 ✓

The foregoing is a correct description, J. Dickenson - Manufacturer.

Dates of Survey } During progress of work in shops -- } 1912. Jul 4 to 20 Aug. Is the approved plan of boiler forwarded herewith Yes

while building } During erection on board vessel -- } (6) Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Examined during construction Materials & workmanship good. tested by hydro pressure. found sound & tight at 180 lbs

Survey Fee ... £ 2 : 2 : When applied for, 29.8.1912

Travelling Expenses (if any) £ : : When received, 4/9/12

J. J. Hindley
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.