

FRI. OCT. 18. 1912 *Std. Rpt. 25456*

REPORT ON BOILERS.

No. *7125*

FRI. SEP. 6 - 1912

Received at London Office

pt. 5a.

Description of Ship *Stockton* Port of *MIDDLESBROUGH-ON-TEES.*
 Date, First Survey *23rd July* Last Survey *29th Aug. 1912*
 No. in Survey held at *Stockton* (Number of Visits *8*) Gross *3914*
 Reg. Book. *515 "LAERTIS"* Tons *2380*
 Length *115* When built *1912*
 Master *S. Hanos* Built at *Sunderland* By whom built *Sir Jas. Laing & Sons Ltd*
 Rivets *By whom made* *George Black Ltd* when made *1912*
 Engines made at *Sunderland* By whom made *Geo. Black Ltd* when made *1912*
 Stays *Stockton* By whom made *Messrs Riley Bros Ltd (4441)* when made *1912*
 Port belonging to *Ithaca*
 Owners *G. C. Dracoulis*

MULTITUBULAR BOILERS — MAIN, AUXILIARY OR DONKEY. — Manufacturers of, *Steel John Spencer & Sons Ltd*
 (5) Total Heating Surface of Boilers *1010 sq. ft.* Is forced draft fitted *No* No. and Description of Boilers *One S.E. Cyl. Mult.*
 Working Pressure *100 lbs* Tested by hydraulic pressure to *200 lbs* Date of test *29.8.12*
 Certificate *4933* Can each boiler be worked separately Area of fire grate in each boiler *35 sq. ft.* No. and Description of Safety valves to each boiler *Two direct spring* Area of each valve *594 sq. in.* Pressure to which they are adjusted *103*
 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 *16"* Int. Mean dia. of boilers *10'-6"* Length *10'-6"*
 Material of shell plates *Steel* Thickness *9/16"* Range of tensile strength *29-33* Are the shell plates welded or flanged *No*
 Description of riveting: cir. seams *D.R. Lap.* long. seams *D.R. 3 Rivets* Diameter of rivet holes in long. seams *7/16"* Pitch of rivets *4 1/2"*
 Width of butt straps *8 1/2" x 9/16"* Per centages of strength of longitudinal joint *81.9* Working pressure of shell by rules *115 lbs*
 Size of manhole in shell *16" x 12"* Size of compensating ring *7 3/4" McNeil* No. and Description of Furnaces in each boiler *Two plain* Material *Steel* Outside diameter *39"* Length of plain part *110"* Thickness of plates *68 Mean*
 Description of longitudinal joint *Welded* No. of strengthening rings *9* Working pressure of furnace by the rules *115 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *9/16"* Back *9/16"* Top *9/16"* Bottom *3/4"* Pitch of stays to ditto: Sides *11" x 8 3/4"* Back *10" x 10 1/2"*
 Stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *104* Material of stays *Steel* Diameter at smallest part *27"*
 Area supported by each stay *105* Working pressure by rules *112* End plates in steam space: Material *Steel* Thickness *32"*
 How are stays secured *by nuts* Working pressure by rules *117* Material of stays *Steel* Diameter at smallest part *27"*
 Area supported by each stay *297* Working pressure by rules *114* Material of Front plates at bottom *Steel* Thickness *32"* Material of lower back plate *Steel* Thickness *32"* Greatest pitch of stays *13" x 10 1/2"* Working pressure of plate by rules *177* Diameter of tubes *3 1/4"*
 Pitch of tubes *4 1/2" x 4 3/8"* Material of tube plates *Steel* Thickness: Front *3/32"* Back *3/4"* Mean pitch of stays *11 1/16"* Pitch across wide water spaces *14"* Working pressures by rules *111 lbs* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *6" x 1 1/2"* Length as per rule *27"* Distance apart *11 1/4"* Number and pitch of Stays in each *2 @ 8"*
 Working pressure by rules *100 lbs* 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 End plates: Thickness How stayed
 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, FOR RILEY & CO. (BOILER MAKERS) LTD. Manufacturer.

Dates of Survey: During progress of work in shops - *19th July, 23rd July, 25th Aug., 1.8.13, 16.29.* Is the approved plan of boiler forwarded herewith *yes*
 while building: During erection on board vessel - *Sep 21, 26, Oct 5, 11* Total No. of visits *8*

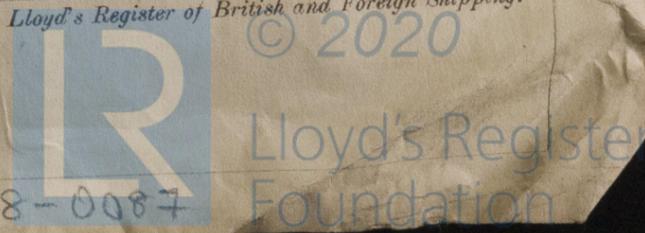
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been constructed under Special Survey, is of good material and workmanship, and has been tested by hydraulic pressure with satisfactory results. - (safety washers: - F 1 1/2. A 3/8)*

The boiler has been satisfactorily fixed on the main deck of the vessel and the safety valves adjusted

Survey Fee ... £ *3-7-0* When applied for, *19*
 Travelling Expenses (if any) £ ... When received, *19*

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.
J. H. ... & W. Morrison

FRI. OCT. 18. 1912



Committee's Minute
 Assigned

W858-0087