

REPORT ON BOILERS.

No. 55722.

Received at London Office **14 NOV 1908**

Date of writing Report **19** When handed in at Local Office **13 NOV 1908** Port of **Newcastle on Tyne**
 No. in Survey held at **South Shields** Date, First Survey **July 14th** Last Survey **Nov. 4th** 1908
 Reg. Book. on the **Steel screw Trawler, Lily Melling** (Number of Visits) Tons { Gross **246** Net **96**
 Master **J. J. Wragg** Built at **North Shields** By whom built **Smiths Dock Co Ltd 3914** When built **1908**
 Engines made at **North Shields** By whom made **Shields Engineering Co Ltd. 169** when made **1908**
 Boilers made at **South Shields** By whom made **J. T. Eltringham & Co Bowdon 1599** when made **1908**
 Registered Horse Power **85** Owners **H. Melling** Port belonging to **Fleetwood**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel **J. Spencer Sons**
 (Letter for record **S**) Total Heating Surface of Boilers **1555** Is forced draft fitted **No** No. and Description of Boilers **One Cyb Multitubular** Working Pressure **180 lbs** Tested by hydraulic pressure to **360 lbs** Date of test **24-9-08**
 No. of Certificate **7762** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **50 sq ft** No. and Description of safety valves to each boiler **two direct spring** Area of each valve **4.9 sq in** Pressure to which they are adjusted **180 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 **10"** dia. of boilers **13'-0"** Length **11'-2 1/8"**
 Material of shell plates **Steel** Thickness **1 3/32"** Range of tensile strength **28 3/4 - 32** Are the shell plates welded or flanged **No**
 Descrip. of riveting: cir. seams **L. D. R.** long. seams **D. B. T. R.** Diameter of rivet holes in long. seams **13/16"** Pitch of rivets **7"**
 Length of plates or width of butt straps **16 5/8"** Per centages of strength of longitudinal joint rivets **86.2** Working pressure of shell by rules **184 lbs** Size of manhole in shell **16" x 12"** Size of compensating ring **7 1/2" x 1 3/32"** No. and Description of Furnaces in each boiler **Three plain** Material **Steel** Outside diameter **40"** Length of plain part top **82 1/2"** Thickness of plates crown **49/64"** bottom **82 1/2"** bottom **49/64"**
 Description of longitudinal joint **Yes** No. of strengthening rings **1** Working pressure of furnace by the rules **183 lbs** Combustion chamber plates: Material **Steel** Thickness: Sides **23/32"** Back **1/16"** Top **23/32"** Bottom **49/64"** Pitch of stays to ditto: Sides **10" x 9 1/4"** Back **9 7/8" x 9 7/8"**
 Top **10" x 8 1/2"** If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **192 lbs** Material of stays **Steel** Diameter at smallest part **1 1/2"** Area supported by each stay **85 sq in** Working pressure by rules **209 lbs** End plates in steam space: Material **Steel** Thickness **1 1/32"**
 Pitch of stays **17 1/4" x 16"** How are stays secured **D. N. T. W.** Working pressure by rules **182 lbs** Material of stays **Steel** Diameter at smallest part **2 7/32"**
 Area supported by each stay **276 sq in** Working pressure by rules **190 lbs** Material of Front plates at bottom **Steel** Thickness **1"** Material of Lower back plate **Steel** Thickness **7/8"** Greatest pitch of stays **14 1/4" x 9 1/8"** Working pressure of plate by rules **184** Diameter of tubes **3 1/2"**
 Pitch of tubes **4 3/4" x 4 3/4"** Material of tube plates **Steel** Thickness: Front **1 1/32" + 1"** Back **2 7/32"** Mean pitch of stays **11 1/8"** Pitch across wide water spaces **14 1/4"** Working pressures by rules **181 lbs** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **9" x 1 1/2"** Length as per rule **34 1/2"** Distance apart **8 1/2"** Number and pitch of Stays in each **Two 10"**
 Working pressure by rules **185 lbs** Superheater or Steam chest; how connected to boiler **No** Can the superheater be shut off and the boiler worked separately **No** Diameter **No** Length **No** Thickness of shell plates **No** Material **No** Description of longitudinal joint **No** Diam. of rivet holes **No** Pitch of rivets **No** Working pressure of shell by rules **No** Diameter of flue **No** Material of flue plates **No** Thickness **No**
 If stiffened with rings **No** Distance between rings **No** Working pressure by rules **No** End plates: Thickness **No** How stayed **No**
 Working pressure of end plates **No** Area of safety valves to superheater **No** Are they fitted with easing gear **No**

The foregoing is a correct description,
J. T. Eltringham Manufacturers
 Is the approved plan of boiler forwarded herewith **Yes**

Dates of Survey } During progress of } 1908 July 14, 17, 20, 24, 27, 31, Sep. 3, 10, 12, 17, 24.
 while building } During erection on } Please see Rpt. on Machinery.
 board vessel }
 Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey, the workmanship and material is sound and good. The boiler fitted up on board tested under steam found satisfactory -*

Survey Fee **See Copy Report** : : When applied for, 19
 Travelling Expenses (if any) £ : : When received, 19

J. L. Latta *Richard Shalloo*
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **TUES. 17 NOV 1908**
 Assigned

