Rpt. 5a.

REPORT ON BOILERS.

No. 67161.

Received at London Office MON. FEB. 15. 1915

Date of writing Report 4th Feb 191 5 When handed in at Local Office FEB 5 1915 191 Port of NEWCASTLE-ON-TYNE.

No. in Reg. Book. Survey held at S. Shields Date, First Survey July 7. 1914 Last Survey Feb. 2. 1915.

on the S. S. "Trecarne" (Number of Visits) Tons Gross 4196 Net 2678.

Master Built at S. Shields By whom built John Readhead & Sons When built 1915-

Engines made at S. Shields By whom made John Readhead & Sons When made 1915-

Boilers made at do By whom made do When made 1915-

Registered Horse Power Owners (Hain Steamship Co. Ltd Edward Hain & Sons Managers) Port belonging to St Ives

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

(Letter for record R.) **Total Heating Surface of Boilers** 1249 ☐ Is forced draft fitted no **No. and Description of Boilers** One, single-ended **Working Pressure** 90 lbs Tested by hydraulic pressure to 180 lbs Date of test 2-12-14

No. of Certificate 8735 Can each boiler be worked separately ✓ **Area of fire grate in each boiler** 33 ☐ No. and Description of safety valves to each boiler 2 - Spring Area of each valve 7.07 ☐" Pressure to which they are adjusted 95 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 On deck ~~Mean~~ Inside dia. of boilers 10'-9" Length 11'-0"

Material of shell plates Steel Thickness 21/32" Range of tensile strength 28-32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams D. Lap. long. seams D. Lap Diameter of rivet holes in long. seams 1¼" Pitch of rivets 4 3/8"

Lap of plates ~~or width of butt straps~~ 5½" Per centages of strength of longitudinal joint rivets 72.8 plate 71.4 Working pressure of shell by rules 96 lbs Size of manhole in shell 16" x 12" Size of compensating ring 8" x 21/32"

No. and Description of Furnaces in each boiler 2 - plain Material Steel Outside diameter 38" Length of plain part top 87" bottom 117" Thickness of plates crown 17/32" bottom 21/32"

Description of longitudinal joint D. Lap. No. of strengthening rings ✓ Working pressure of furnace by the rules 91 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 21/32" Pitch of stays to ditto: Sides 10½" x 10" Back 12" x 12" Top 12" x 10" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 93 lbs Material of stays Iron ~~Diameter~~ area at smallest part 1.99 Area supported by each stay 144 ☐" Working pressure by rules 103 lbs End plates in steam space: Material Steel Thickness 7/8" Pitch of stays 20" x 18" How are stays secured Dn + Double Nuts Working pressure by rules 107 lbs Material of stays Steel ~~Diameter~~ area at smallest part 4.11 ☐" Area supported by each stay 360 ☐" Working pressure by rules 118 lbs Material of Front plates at bottom Steel Thickness 23/32" Material of Lower back plate Steel Thickness 23/32" Greatest pitch of stays 12" Working pressure of plate by rules 123 lbs Diameter of tubes 3¼" Pitch of tubes 4 3/16" x 4 3/16" Material of tube plates Steel Thickness: Front 23/32" Back 23/32" Mean pitch of stays 13⅛" Pitch across wide water spaces 13½" Working pressures by rules 107 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6" x 1½" Length as per rule 26" Distance apart 12" Number and pitch of Stays in each 2-10" Working pressure by rules 115 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 ✓ 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,

John Readhead Manufacturer.

Dates of Survey while building: During progress of work in shops - - - During erection on board vessel - - - } See machinery report.

Is the approved plan of boiler forwarded herewith yes

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This donkey boiler has been constructed under special survey & the material & workmanship are sound & good.

Survey Fee ... ... £ 8 } See machinery report

Travelling Expenses (if any) £ : } See machinery report

When applied for, 191

When received, 191

Thomas Field

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

Committee's Minute TUE. FEB. 16. 1915

Assigned

WSOH-0131