

REPORT ON MACHINERY.

No. 11448.
TUE. JUL. 13. 1915

Received at London Office

Date of writing Report 12.4.15 When rendered in at Local Office 12.4.15 Port of Aberdeen
 No. in Survey held at Aberdeen Date, First Survey 12.1.15 Last Survey 10.4.1915
 Reg. Book. on the S.S. "P. FANNON" (Number of Visits 44) Gross 211 Net 171.82

Master ✓ Built at Aberdeen By whom built A. Hall & Co. Ltd. No. 514 When built 1915
 Engines made at Aberdeen By whom made A. Hall & Co. Ltd. No. 214 when made 1915
 Boilers made at Glasgow By whom made R. Rowan & Co. No. 238 when made 1915
 Registered Horse Power 41 Owners Aberdeen Pioneer Steam Fishing Co. Ltd. Port belonging to Aberdeen
 Nom. Horse Power as per Section 28 41 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12", 20", 34" Length of Stroke 23" Revs. per minute 110 Dia. of Screw shaft as per rule 6.813 Material of screw shaft as fitted 4 1/2" Scrap iron
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight in the propeller boss yes If the liner is in more than one length are the joints burned 1 length If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive no space If two liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 2' 6"
 Dia. of Tunnel shaft as per rule 6.12 Dia. of Crank shaft journals as per rule 6.22 6.42 Dia. of Crank pin 6 3/4" Size of Crank webs 10 3/4" x 4 1/2" Dia. of thrust shaft under collars 6 3/4" Dia. of screw 8' 3" Pitch of Screw 11' 3" No. of Blades 4 State whether moveable no Total surface 29.67
 No. of Feed pumps 1 Diameter of ditto 2 1/2" Stroke 11" Can one be overhauled while the other is at work ✓
 No. of Bilge pumps 1 Diameter of ditto 2 1/2" Stroke 11" Can one be overhauled while the other is at work ✓
 No. of Donkey Engines one Sizes of Pumps 5 1/4" x 3 1/2" x 5" duplex No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room one of 2"
 In Holds, &c. Fishhold & Slushwell one each of 2"
 Also ejector drawing from all tanks, and with separate suction to engine room 2" dia.
 No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size yes 2"
 Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible no
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 What pipes are carried through the bunkers Suctions from Fishhold, Slushwell & F. Tank. How are they protected strong wood casing
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
 Dates of examination of completion of fitting of Sea Connections 15.5.15 of Stern Tube 15.5.15 Screw shaft and Propeller 15.5.15
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record ✓) Manufacturers of Steel ✓
 Total Heating Surface of Boilers 12500 Is Forced Draft fitted no No. and Description of Boilers one single ended
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 15.5.15 No. of Certificate 10144
 Can each boiler be worked separately ✓ Area of fire grate in each boiler 38.7 No. and Description of Safety Valves to each boiler 2 direct spring Area of each valve 4.91 Pressure to which they are adjusted 180 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork about 4" Mean dia. of boilers 12.6" Length 10.3" Material of shell plates
 Thickness Range of tensile strength Are the shell plates welded or flanged ✓ Descrip. of riveting: circ. seams
 Riveting: circ. seams Diameter of rivet holes in long. seams ✓ Pitch of rivets ✓ Lap of plates or width of butt straps ✓
 Percentages of strength of longitudinal joint: ✓ Working pressure of shell by rules ✓ Size of manhole in shell ✓
 Size of compensating ring ✓ No. and Description of Furnaces in each boiler ✓ Material ✓ Outside diameter ✓
 Length of plain part: top Thickness of plates: crown Description of longitudinal joint 25 2/2" No. of strengthening rings ✓
 Working pressure of furnace by the rules ✓ Combustion chamber plates: Material ✓ Thickness: Sides Back ✓ Top ✓ Bottom ✓
 Pitch of stays to ditto: Sides Back ✓ Top ✓ If stays are fitted with nuts or riveted heads ✓ Working pressure by rules ✓
 Material of stays ✓ Diameter at smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ End plates in steam space ✓
 Water Capacity ✓ Material ✓ Thickness ✓ Pitch of stays ✓ How are stays secured ✓ Working pressure by rules ✓ Material of stays ✓
 Diameter at smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ Material of Front plates at bottom ✓
 Thickness ✓ Material of Lower back plate ✓ Thickness ✓ Greatest pitch of stays ✓ Working pressure of plate by rules ✓
 Diameter of tubes ✓ Pitch of tubes ✓ Material of tube plates ✓ Thickness: Front Back ✓ Mean pitch of stays ✓
 Pitch across wide water spaces ✓ Working pressures by rules ✓ Girders to Chamber tops: Material ✓ Depth and ✓
 Thickness of girder at centre ✓ Length as per rule ✓ Distance apart ✓ Number and pitch of stays in each ✓
 Working pressure by rules ✓ Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked ✓
 Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet ✓
 Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓
 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 ✓

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - *Two top & 2 bottom end bolts & nuts; 2 main bearings and 1 set coupling bolts & nuts; 1 set each Air, Circulating, Feed & Bilge pump valves; 1 each main & donkey check valves; bolts & nuts assorted & iron of various sizes.*

The foregoing is a correct description,

For ALEXANDER HALL & CO., LTD

A. Hall
SECRETARY

Manufacturers of main engines.

Dates of Survey while building: During progress of work in shops - *1915 Jan. 12, 18, 22 - Feb. 2, 5, 11, 18, 26 - Mar. 3, 5, 9, 14, 19, 24, 29, 30 - Apr. 1, 6, 13, 15, 19, 22, 28, 30 - May 4, 6, 11, 13, 14*
During erection on board vessel - *15, 19, 21, 25, 27, 29 - June, 1, 2, 4, 9, 11, 14, 24, 29 - July 5, 6, 10*
Total No. of visits *44*

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts - Cylinders *2.11 6.19 24 4* Slides *2.6 6.24* Covers *14 11 3 8* Pistons *14 22 4.11 3 4 8* Rods *18 5 6.22 4 7 2 4 8*
Connecting rods *18 5 6.22 4 7 2 4 8* Crank shaft *22.28 4* Thrust shaft *21.5.15* Tunnel shafts *28.30 4* Screw shaft *30 28 3 4* Propeller *13.28 4*
Stern tube *13 4 6.12 5* Steam pipes tested *29.6.15* Engine and boiler seatings *12.5.15* Engines holding down bolts *1.4.29 6*
Completion of pumping arrangements *5.4.15* Boilers fixed *14.6.15* Engines tried under steam *6.4.15*
Main boiler safety valves adjusted *6.4.15* Thickness of adjusting washers *Port. 1/4" bare. Starboard. 1/4" full.*
Material of Crank shaft *IS* Identification Mark on Do. *556M(DUN)* Material of Thrust shaft *I* Identification Mark on Do. *3999(LTH)*
Material of Tunnel shafts *I* Identification Marks on Do. *935A* Material of Screw shafts *I* Identification Marks on Do. *556M(DUN)*
Material of Steam Pipes *Copper, solid drawn 3/4" bore No. 6 B.W.G.* Test pressure *360 lbs per sq inch*
Is an installation fitted for burning oil fuel *no.* Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with
Is this machinery duplicate of a previous case *yes.* If so, state name of vessel *'Phyllis Belman' Rpt. No. 11442.*

General Remarks (State quality of workmanship, opinions as to class, &c.)
These engines have been constructed under special survey, and in accordance with the requirements of the Rules. The materials and workmanship are good - on completion they were properly fitted on board together with the boiler, (B Rowan & Co's No. 238. Gls rept No. 35222) and tried under steam with satisfactory results and are now in good working order, and in my opinion entitled to the record + L.M.C. 4.15. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 7.15.

J.M. Star
Ridley Powell
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee ... £ 1 : : : When applied for, *12.4.1915*
Special ... £ 10 : 10 : : :
Donkey Boiler Fee ... £ : : : :
Travelling Expenses (if any) £ : : : : When received, *31/7/1915*

Committee's Minute *FRI. JUL. 16. 1915*
Assigned *+ L.M.C. 7.15*

Alberdeen Office

The Surveyors are requested not to write on or below the space for Committee's Minutes.

MACHINERY CERTIFICATE REGISTERED

