

Port of HullReceived at London Office SAT. 26 AUG. 1905

No. in Survey held at Hull Date, first Survey Apr 12<sup>th</sup> Last Survey Aug 14 1905  
 Reg. Book. 23 Supp. on the Steel Se K. Gyano (Number of Visits 29) Gross 214  
 Master Selby Built at Selby By whom built Lochane Sons Tons Net 77  
 Engines made at Hull By whom made Charles D. Holmes & Co when made 1905  
 Boilers made at Hull By whom made Charles D. Holmes & Co when made 1905  
 Registered Horse Power 100 Owners A. I. Black Port belonging to Grimby  
 Nom. Horse Power as per Section 28 67 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" - 21" - 34" Length of Stroke 24" Revs. per minute 110 Dia. of Screw shaft as per rule 4 7/8" Material of Steel  
 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 burned 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 If two  
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 30 1/2"  
 Dia. of main part shaft as per rule 6 26 1/2" Dia. of Crank shaft journals as per rule 6 58 1/2" Dia. of Crank pin 6 1/2" Size of Crank webs 13 1/2" x 4 3/8" Dia. of thrust shaft under  
 collars 6 7/8" Dia. of screw 8" - 6" Pitch of screw 10" - 9" No. of blades 4 State whether moveable No Total surface 27 1/2 sq ft  
 No. of Feed pumps 1 ✓ Diameter of ditto 2 1/2" Stroke 24" Can one be overhauled while the other is at work  
 No. of Bilge pumps 1 ✓ Diameter of ditto 2 1/2" Stroke 24" Can one be overhauled while the other is at work  
 No. of Donkey Engines 1 Sizes of Pumps 2 1/2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room Two 2" ✓ In Holds, &c. Three 2" ✓ (two to slush wells, one to  
 hold) and ejector suction from eng. bilge holds, with discharge on deck  
 No. of bilge injections 1 sizes 3 Connected to condenser, or to circulating pump pump 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 0  
 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 hold suction How are they protected 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  
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launching Is the screw shaft tunnel watertight None  
 Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record 8) Total Heating Surface of Boilers 1096 sq ft Is forced draft fitted No  
 No. and Description of Boilers One Cyl. Multi Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs  
 Date of test 17.7.05 Can each boiler be worked separately Yes Area of fire grate in each boiler 32.8 sq ft No. and Description of safety valves to  
 each boiler Two Spring Area of each valve 3.98 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 3 1/2" Mean dia. of boilers 12' - 6" Length 10' - 0" Material of shell plates Steel  
 Thickness 1 1/2" Range of tensile strength 29.32 Are they welded or flanged Yes Descrip. of riveting: cir. seams L. O. long. seams O. B. S. I. R.  
 Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 7" Lap of plates or width of butt straps 15"  
 Per centages of strength of longitudinal joint 86.5 Working pressure of shell by rules 185 lbs Size of manhole in shell 16" x 12"  
 Size of compensating ring 7" x 1 1/2" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 43"  
 Length of plain part top 5' - 10" Thickness of plates bottom 6 1/4" Description of longitudinal joint welded No. of strengthening rings None  
 Working pressure of furnace by the rules 184 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 11/16" Top 3/32" Bottom 3/32"  
 Pitch of stays to ditto: Sides 9" Back 9" x 8 1/2" Top 8 1/2" x 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 213 lbs  
 Material of stays Steel Diameter at smallest part 1 5/8" Area supported by each stay 106.8 Working pressure by rules 202 lbs End plates in steam space:  
 Material Steel Thickness 1 1/2" Pitch of stays 17 1/2" x 17 1/2" How are stays secured nut inside Working pressure by rules 185 lbs Material of stays Steel  
 Diameter at smallest part 2 1/2" Area supported by each stay 306.25 Working pressure by rules 202 lbs Material of Front plates at bottom Steel  
 Thickness 1 1/8" Material of Lower back plate Steel Thickness 1 5/8" Greatest pitch of stays 15" Working pressure of plate by rules 180 lbs  
 Diameter of tubes 3 1/4" Pitch of tubes 4 5/8" Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 9 1/4"  
 Pitch across wide water spaces 15" Working pressures by rules 180 lbs Girders to Chamber tops: Material Iron Depth and  
 thickness of girder at centre 9" x 13 1/2" Length as per rule 2' - 8" Distance apart 8 3/4" Number and pitch of Stays in each 3 - 8 1/2"  
 Working pressure by rules 193 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked  
 separately Yes Diameter 18" Length 10' Thickness of shell plates 1 1/2" Material Steel Description of longitudinal joint Butt Diam. of rivet  
 holes 1 1/2" Pitch of rivets 7" Working pressure of shell by rules 180 lbs Diameter of flue 18" Material of flue plates Steel Thickness 1 1/2"  
 If stiffened with rings Yes Distance between rings 12" Working pressure by rules 180 lbs End plates: Thickness 1 1/2" How stayed By stays  
 Working pressure of end plates 180 lbs Area of safety valves to superheater 106.8 Are they fitted with easing gear Yes



**DONKEY BOILER—** No. Description

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Thickness of shell crown plates Radius of do. No. of Stays to do.

Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint

Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

**SPARE GEAR.** State the articles supplied:— Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set each, air, circulating feed and bilge pump valves, and a quantity of assorted bolts and nuts etc.

The foregoing is a correct description,

Charles V. Holmes Manufacturer.

Dates of Survey while building

During progress of work in shops - 1905 - Apr 12 May 2 9 10 16 23 29 31 Jun 2 8 12 15 19 20 22 26 27 July 4 6 8 12

During erection on board vessel - July 15 17 20 21 27 31 Aug 2 14.

Total No. of visits 29

Is the approved plan of main boiler forwarded herewith Yes

**General Remarks** (State quality of workmanship, opinions as to class, &c. The machinery and boiler) of this vessel have been inspected throughout construction in accordance with the Society's Rules. The materials and workmanship are good. The boiler tested by hydraulic pressure, and with the engines placed on board and tested under steam. They are now in good order and safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of \*L.M.C. 8.05 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD L.M.C. 8.05.

Imps.  
26.8.05

26.8.05

The amount of Entry Fee.. £ 1 : - : -

Special .. .. £ 10 : 1 : -

Donkey Boiler Fee .. .. £ - : - : -

Travelling Expenses (if any) £ - : 8 2

When applied for,

25/8/05

When received,

31-8-05

James Barclay, Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUES. 29 AUG 1905

Assigned

+ L.M.C. 8.05

MACHINERY CERTIFICATE WRITTEN.



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