

REPORT ON MACHINERY.

Port of Hull

Received at London Office MUN. 4 SEP 1905

No. in Survey held at Hull Date, first Survey May 18th 1905 Last Survey Aug 16th 1905
 Reg. Book. 10 Supp on the Screw Trawler "Lord Curzon" (Number of Visits 20)
 Master Built at Hull By whom built Carlisle S. B. & Co. L^d Tons Gross 266
 Net 102
 Engines made at Hull By whom made Carlisle S. B. & Co. L^d when made 1905
 Boilers made at do By whom made do when made 1905
 Registered Horse Power Owners Yorkshire Steam Fishing Co. L^d Port belonging to Hull
 Nom. Horse Power as per Section 28 77 1/2 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12 3/4, 22, 36 Length of Stroke 24 Revs. per minute 110 Dia. of Screw shaft as per rule 7.4 Material of screw shaft 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 ✓ 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 ✓ Length of stern bush 2-8 1/2
 Dia. of Tunnel shaft as per rule 6.7 Dia. of Crank shaft journals as per rule 7.1 Dia. of Crank pin 7 1/2 Size of Crank webs 4 x 4 3/8 Dia. of thrust shaft under collars 7 1/2 Dia. of screw 9-0 Pitch of screw 11-6 No. of blades 4 State whether moveable No Total surface 27 sq. ft
 No. of Feed pumps 1 Diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work ✓
 No. of Bilge pumps 1 Diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work ✓
 No. of Donkey Engines 2 Sizes of Pumps 6 x 3 x 6, 6 x 3 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Two 2" dia. In Holds, &c. One 2" dia. in both slush wells + one 2" dia. in fore compartment. Ejector suction from all bilges + discharge of deck.
 No. of bilge injections 1 sizes 3 1/2 Connected to condenser, or to circulating pump Cond. Is a separate donkey suction fitted in Engine room & size 3" ejector
 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 ✓
 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 None How are they protected ✓
 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 launch Is the screw shaft tunnel watertight None
 Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.— (Letter for record (5)) Total Heating Surface of Boilers 1250 sq. ft. Is forced draft fitted No
 No. and Description of Boilers One S.E. cyl. Mult. Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs
 Date of test 18.7.05 Can each boiler be worked separately ✓ Area of fire grate in each boiler 43 sq. ft. No. and Description of safety valves to each boiler Two direct spring Area of each valve 4.9 Pressure to which they are adjusted 205 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 7" Mean dia. of boilers 12.9 Length 10.3 1/2 Material of shell plates Steel
 Thickness 1 1/2 Range of tensile strength 28-32 Are they welded or flanged ✓ Descrip. of riveting: cir. seams S.R. Lap long. seams S.S. 5 Rivets
 Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8 7/16 Lap of plates or width of butt straps 17 1/2
 Per centages of strength of longitudinal joint rivets 88.3 plate 85.2 Working pressure of shell by rules 201 lbs Size of manhole in shell 16 x 12
 Size of compensating ring 3.4 x 2.6 x 1.5 No. and Description of Furnaces in each boiler Three plain Material Steel Outside diameter 3-0
 Length of plain part top 6.4 bottom 5-10 3/4 Thickness of plates 3/4 Description of longitudinal joint Welded No. of strengthening rings ✓
 Working pressure of furnace by the rules 207 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/16 Back 1/16 Top 1/16 Bottom 1/16
 Pitch of stays to ditto: Sides 8 1/2 x 8 Back 9 5/8 x 7 5/8 Top 8 x 7 1/4 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 217 lbs
 Material of stays Steel Diameter at smallest part 1.76 Area supported by each stay 68 Working pressure by rules 207 lbs End plates in steam space: Material Steel Thickness 1 3/32 Pitch of stays 17 x 15 How are stays secured Nuts + lapped into end plates Working pressure by rules 209 lbs Material of stays Steel
 Diameter at smallest part 2 7/16 Area supported by each stay 255 Working pressure by rules 203 lbs Material of Front plates at bottom Steel
 Thickness 15/16 Material of Lower back plate Steel Thickness 2 3/4 + 3/4 Greatest pitch of stays 19 x 11 1/2 Working pressure of plate by rules 220 lbs
 Diameter of tubes 3 1/4 Pitch of tubes 4 7/8 x 4 1/4 Material of tube plates Steel Thickness: Front 15/16 Back 13/16 Mean pitch of stays 9 3/4 x 9 1/2
 Pitch across wide water spaces 13 3/4 Working pressures by rules 202 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/2 x 1 1/4 Length as per rule 2-9 15/16 Distance apart 7 1/4 Number and pitch of Stays in each 3 2 8
 Working pressure by rules 246 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 ✓

If not, state whether, and when, one will be sent? Is a Report also sent on the Hull of the Ship? Yes



93171

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 top-end & two bottom-end connecting rod bolts & nuts. Two main bearing bolts & nuts. One set of coupling bolts & nuts. One set of feed & bilge pump valves. Main & donkey feed chest valves. Assorted bolts & nuts etc.*

The foregoing is a correct description,
 FOR EARLE'S SHIPBUILDING & ENGINEERING CO. LIMITED, Manufacturer.

Flomusculus 1905: - May 18. 25. 31. Jun 2. 7. 14. 15. 19. 22. 23. 28. July 3. 6. 15. 18. 28.

Dates of Survey while building { During progress of work in shops - - } _____
 { During erection on board vessel - - } *Aug 1. 5. 8. 16.*
 Total No. of visits *20*

Is the approved plan of main boiler forwarded herewith *yes*
 " " " donkey " " " *✓*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Engines and Boiler of this vessel have been constructed under Special Survey, are of good material and workmanship, and have been fitted and secured on board in accordance with the Rules. They are now in good working condition and in my opinion eligible to have the notation of +LMC 8,05, in the Register Book.

It is submitted that this vessel is eligible for THE RECORD **LMC 8.05**

Imp.
4.9.05
4.9.05

Certificate (if required) to be sent to _____

The amount of Entry Fee.	£ 1 : - : -	When applied for, <i>29/10/05</i>
Special	£ 11 : 11 : -	
Donkey Boiler Fee	£ - : - : -	When received, <i>12/11/05</i>
Travelling Expenses (if any) £		<i>13/10/05</i>

[Signature]
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute *TUES. 5 SEP 1905*
 Assigned *+ Lmb 8 05*



MACHINERY CERTIFICATE WRITTEN.