

REPORT ON MACHINERY.

No. 16782

Port of Hull

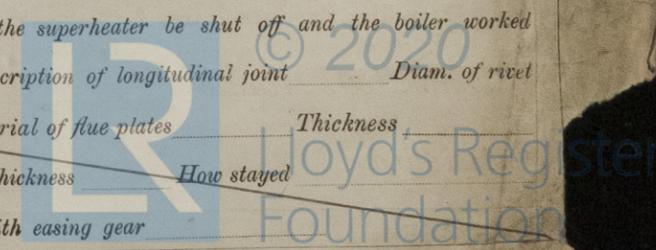
Received at London Office 10 MAY 1905

No. in Survey held at Hull Date, first Survey Nov 10/04 Last Survey May 4th 1905
 Reg. Book. 5684 on the Steel S. K. Gamecock (Number of Visits 4.8) Tons ^{Gross} 171 _{Net} 51
 Master Goole Built at Goole By whom built Goole S. B. Ropg Co When built 1905
 Engines made at Hull By whom made Messrs Charles D. Holmes Co when made 1905
 Boilers made at Hull By whom made Messrs Charles D. Holmes Co when made 1905
 Registered Horse Power 51 Owners Messrs Kelsall Bros Beeching Port belonging to Hull
 Nom. Horse Power as per Section 28 51 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Tri Compound No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12" - 18" - 30" Length of Stroke 21" Revs. per minute 114 Dia. of Screw shaft ^{as per rule} 6.314 _{as fitted} 6.3/4 Material of Iron screw shaft
 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 Length of stern bush 31"
 Dia. of plain ^{as per rule} 5.52 _{as fitted} 5.3/4 Dia. of Crank shaft journals ^{as per rule} 5.85 _{as fitted} 6" Dia. of Crank pin 6" Size of Crank webs 11 1/2 x 4 1/2 Dia. of thrust shaft under collars 6" Dia. of screw 8'-0" Pitch of screw 11'-0" x 10'-0" No. of blades 4 State whether moveable No Total surface 25 1/4 sq ft
 No. of Feed pumps One Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work
 No. of Bilge pumps One Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work
 No. of Donkey Engines One Sizes of Pumps 2 3/4" x 4" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room One 2" In Holds, &c. One two each to sluick well
 Ejector suction from E. C. bilge & hold, 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 None
 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 902 sq ft Is forced draft fitted No
 No. and Description of Boilers One Cyl. Multi Working Pressure 160 lbs Tested by hydraulic pressure to 320 lbs
 Date of test 9. 3. 05 Can each boiler be worked separately Area of fire grate in each boiler 25 sq ft No. and Description of safety valves to each boiler Two Spring Area of each valve 3.9 sq in Pressure to which they are adjusted 165 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 11 1/2" Mean dia. of boilers 10'-7 5/8" Length 9'-6" Material of shell plates Steel
 Thickness 13/16 Range of tensile strength 29-32 tons Are they welded or flanged Descrip. of riveting: cir. seams L. D. long. seams D. B. S. I. R.
 Diameter of rivet holes in long. seams 2 7/8" Pitch of rivets 6 3/16" Lap of plates or width of butt straps 14 1/4"
 Per centages of strength of longitudinal joint ^{rivets} 88.9 _{plate} 85.8 Working pressure of shell by rules 166 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 7" x 13/16" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 34"
 Length of plain part ^{top} 6'-0" _{bottom} 32 Thickness of plates ^{crow} 21 _{bottom} 32 Description of longitudinal joint Welded No. of strengthening rings None
 Working pressure of furnace by the rules 182 lbs Combustion chamber plates: Material Steel Thickness: Sides 21/32 Back 21/32 Top 5/8 Bottom 21/32
 Pitch of stays to ditto: Sides 9" x 8 1/2" Back 9" x 9" Top 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 183 lbs
 Material of stays Steel Diameter at smallest part 1 5/8" Area supported by each stay 81 sq in Working pressure by rules 230 lbs End plates in steam space: Material Steel Thickness 15/16" Pitch of stays 15" x 15" How are stays secured D. 7. W. Working pressure by rules 185 lbs Material of stays Steel
 Diameter at smallest part 2.465 Area supported by each stay 225 sq in Working pressure by rules 211 lbs Material of Front plates at bottom Steel
 Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 12" Working pressure of plate by rules 172 lbs
 Diameter of tubes 3" Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 8 1/2" - 8 3/4"
 Pitch across wide water spaces 14" Working pressures by rules 211 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 7 3/4" x 1 1/2" Length as per rule 2'-0 19/32" Distance apart 7 1/2" Number and pitch of Stays in each 2 - 8 1/2"
 Working pressure by rules 274 lbs Superheater or Steam chest; how connected to boiler 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? [2000-6,04-Copyable Ink.]



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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 bottom end connecting rod bolts and nuts, two main bearing bolts nuts, one set coupling bolts & nuts, one set each air, circulating, feed, bilge pump valves, & a quantity of assorted bolts nuts etc.*

The foregoing is a correct description,
Charles D. Holmwood Manufacturer.

Dates of Survey while building { During progress of work in shops - } 1904:— Nov 10. 18. 30. Dec 5. 9. 12. 16. 20. 21 } 1905:— Jan 4. 5. 11. 12. 18. 19. 20. 25. 26. Feb. 2. 3.
 { During erection on board vessel - } Feb 6. 7. 13. 14. 15. 16. 22. 23. 27. Mar 2. 7. 9. 11. 13. 16. 17. 18. 22. 23. Apr 7. 8. 10. 12. 13. 15. 18. 19. May 4.
 Total No. of visits... 48 Is the approved plan of main boiler forwarded herewith Yes

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery 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, & safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notification of * L.M.C. 5.05 in the Register Book.*

It is submitted that this vessel is eligible for THE RECORD L.M.C. 5.05.

J.D. 10.5.05
J.M.S. 10.5.05

The amount of Entry Fee... £ 1 : : : :
 Special ... £ 8 : : : :
 Donkey Boiler Fee ... £ : : : :
 Travelling Expenses (if any) £ : : 3 : : : :
 When applied for, 9/5/1905
 When received, 31.5.05

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

Committee's Minute FRI. 12 MAY 1905
 Assigned + L.M.C. 5.05



Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)