

# REPORT ON MACHINERY.

9072

Port of Hull

THURS. 28 JUN 1894  
Received at London Office 18

No. in Survey held at Hull Date, first Survey Feb. 26<sup>th</sup> Last Survey 25<sup>th</sup> June 1894.  
 Reg. Book. on the Iron Steam Trawler *Chanticleer* (Number of Visits 13)  
 Master Chant Built at Hull By whom built Cook Welton & Gemmill When built 1894  
 Engines made at Hull By whom made Charles & Holmes & Co when made 1894  
 Boilers made at Hull By whom made Charles & Holmes & Co when made 1894  
 Registered Horse Power 45 Owners Grant & White & Co. Port belonging to Hull  
 Nom. Horse Power as per Section 28

Tons { Gross 150  
Net 62

ENGINES, &c.— Description of Engines Triple Compound Inverted S.A. No. of Cylinders Three  
 Diameter of Cylinders 11 1/2 - 18 - 30 Length of Stroke 22 Revolutions per minute 108 Diameter of Screw shaft as per rule 5.55  
as fitted 6 1/6  
 Diameter of Tunnel shaft as per rule 5.27 Diameter of Crank shaft journals 6 Diameter of Crank pin 6 Size of Crank webs 9 x 4 1/4  
as fitted 5 3/4  
 Diameter of screw 7:9 Pitch of screw 11:3 to 11:7 1/2 No. of blades 4 State whether moveable no Total surface 23 1/4 sq ft  
 No. of Feed pumps One Diameter of ditto 17/8 Stroke 22 Can one be overhauled while the other is at work -  
 No. of Bilge pumps One Diameter of ditto 2 Stroke 22 Can one be overhauled while the other is at work -  
 No. of Donkey Engines One Sizes of Pumps 2 1/2 in 4 Duplex No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room One 2 In Holds, &c. One 2  
 Also 3" Ejector with suction in the Engine room bilge and discharge on deck  
 No. of bilge injections one sizes 3 1/2 Connected to condenser, or to circulating pump yes Is a separate donkey suction fitted in Engine room & size no - 4 cts  
 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 yes  
 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 suction to forward 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 Jan 1894 Is the screw shaft tunnel watertight no tunnel  
 Is it fitted with a watertight door - worked from -

OILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 708 sq ft  
 No. and Description of Boilers One Cylindrical Mult<sup>e</sup> Working Pressure 160 lb Tested by hydraulic pressure to 520 lb  
 Date of test 28/5/94 Can each boiler be worked separately - Area of fire grate in each boiler 24 sq ft No. and Description of safety valves to  
 each boiler Two Spring loaded Area of each valve 3.95 sq in Pressure to which they are adjusted 163 lb Are they fitted  
 with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 7 Mean diameter of boilers 10:0  
 Length 9:6 Material of shell plates Steel Thickness 27/32 Description of riveting: circum. seams all in lap long. seams all shop 3/16  
 Diameter of rivet holes in long. seams 15/16 Pitch of rivets 7 Lap of plates or width of butt straps 14 1/4  
 Per centages of strength of longitudinal joint rivets 86.95% Working pressure of shell by rules 165 lb Size of manhole in shell 16:12  
plate 86.6%  
 Size of compensating ring 6 x 27/32 No. and Description of Furnaces in each boiler Two Holmes Material Steel Outside diameter 35  
 Length of plain part top 15 Thickness of plates crown 1/2 Description of longitudinal joint welded No. of strengthening rings 4  
bottom 15 bottom 1/2  
 Working pressure of furnace by the rules 162 lb Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 10/16  
 Pitch of stays to ditto: Sides 8 Back 8 Top 8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 171 lb  
 Material of stays Steel Diameter at smallest part 1 3/8 Area supported by each stay 8 x 8 Working pressure by rules 185 lb End plates in steam space:  
 Material Steel Thickness 14 3/16 Pitch of stays 14 3/4 How are stays secured all nuts Working pressure by rules 167 lb Material of stays Steel  
 Diameter at smallest part 2:3 Area supported by each stay 14 3/4 Working pressure by rules 178 lb Material of Front plates at bottom Steel  
 Thickness 12/16 Material of Lower back plate Steel Thickness 11/16 Greatest pitch of stays 8 Working pressure of plate by rules 160 lb  
 Diameter of tubes 3 1/2 Pitch of tubes 4 3/4 Material of tube plates Steel Thickness: Front 12/16 Back 13/16 Mean pitch of stays 9 1/2  
 Pitch across wide water spaces 15 1/2 Working pressures by rules 160 lb Girders to Chamber tops: Material Iron Depth and  
 thickness of girder at centre 7 x 14 1/16 all Length as per rule 29 1/4 Distance apart 7 3/8 Number and pitch of Stays in each two 8  
 Working pressure by rules 170 lb 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  
 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



**DONKEY BOILER**— Description *No Donkey Boiler*

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 \_\_\_\_\_

Description of riveting long. seams \_\_\_\_\_ Diameter of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_

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:— *The top end bolts. The bottom end bolts. The main bearing bolts. One set coupling bolts. One set feed pump valves. One set bilge pump valves. One set check valves & safety valve spring.*

*The vessel efficient with masts and sails as a steamer*

The foregoing is a correct description,  
*Charles D. Holmes* Manufacturer.

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

*The Machinery and Boiler of this Steam Steamer have been constructed under Special Survey and placed on board in accordance with the Society's Rules. They are now in my opinion in safe working condition and the case is respectfully submitted for the notification in the Register Book.*

*W. A. 28-6-94*

*It is submitted that this vessel is eligible for THE RECORD + LMC 6-94*

MACHINERY CERTIFICATE

Certificate (if required) to be sent to *None*

The amount of Entry Fee.. £ 1 : 0 : . When applied for, *27/6/1894*

Special .. .. £ 0 : 0 : .

Donkey Boiler Fee .. .. £ - : - : . When received, *30.6.94*

Travelling Expenses (if any) £ - : - : .

**FRI 29 JUN 1894**

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

Committee's Minute  
 Assigned *+ LMC 6.94*

