

Port of Hull

Received at London Office 17 MAR 1906

No. in Survey held at Hull Date, first Survey May 19th Last Survey 13th Mar 1906
Reg. Book. 72 Supp on the Steel S. K. King Lear
Master Built at Hull By whom built Messrs Earle's Co Ltd
Engines made at Hull By whom made Messrs Amos Smith when made 1906
Boilers made at Hull By whom made Amos Smith when made 1906
Registered Horse Power Owners Messrs' Steam Fishing Co Ltd Port belonging to Hull
Nom. Horse Power as per Section 28 96 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 14" ~ 23" ~ 38" Length of Stroke 27" Revs. per minute 115 Dia. of Screw shaft as per rule 8.95" Material of 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 One 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 If two
liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 40"
Dia. of Thrust shaft as per rule 7.18" Dia. of Crank shaft journals as per rule 7.54" Dia. of Crank pin 8" Size of Crank webs 12 1/4" x 5" Dia. of thrust shaft under
collars 8" Dia. of screw 9" x 9" Pitch of screw 12'-6" to 11'-6" No. of blades 4 State whether moveable No Total surface 30.6 sq ft
No. of Feed pumps Two Diameter of ditto 2 5/8" Stroke 18" Can one be overhauled while the other is at work Yes
No. of Bilge pumps Two Diameter of ditto 2 5/8" Stroke 18" Can one be overhauled while the other is at work Yes
No. of Donkey Engines One Sizes of Pumps 6" x 4 1/4" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room Two two inch In Holds, &c. One, each 2 1/2" to Fish hold, + to
forecastle, ejector suction from eng room bilge, fish hold forecastle
No. of bilge injections 1 sizes 4" 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 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 hold forecastle 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 1665 sq ft Is forced draft fitted No
No. and Description of Boilers One Cyl. Multi. Working Pressure 185 lbs Tested by hydraulic pressure to 370 lbs
Date of test 22.1.06 Can each boiler be worked separately Area of fire grate in each boiler 55 sq ft No. and Description of safety valves to
each boiler Two Spring Area of each valve 5.94 sq ft Pressure to which they are adjusted 190 lbs Are they fitted with easing gear Yes
Smallest distance between boilers, or uptakes and bunkers or woodwork 5 1/2" Dia. of boilers 14'-0" Length 10'-7 1/2" Material of shell plates Steel
Thickness 1 5/32" Range of tensile strength 28-32 Are they welded or flanged Descrip. of riveting: cir. seams L. D. long. seams D. B. S. J. R
Diameter of rivet holes in long. seams 1 9/32" Pitch of rivets 8.72" Lap of plates or width of butt straps 18 3/4"
Per centages of strength of longitudinal joint rivets 95.1 Working pressure of shell by rules 185 lbs Size of manhole in shell 16" x 12"
plate 85.3
Size of compensating ring 40 x 30 x 1 1/32 No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 41 1/8"
Length of plain part top 5'-10 7/8" Thickness of plates crown 49" Description of longitudinal joint Welded No. of strengthening rings 0
bottom 64" Working pressure of furnace by the rules 191 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 7 1/2" x 8 3/4" Back 8" x 8 1/4" Top 7 1/2" x 7 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 247 lbs
Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 55.21 sq ft Working pressure by rules 214 lbs End plates in steam space:
Material Steel Thickness 1 1/16" Pitch of stays 18" x 15 1/2" How are stays secured secured into both end plates, nuts and washers and
Diameter at smallest part 6.10 Area supported by each stay 279 sq ft Working pressure by rules 218 lbs Material of Front plates at bottom Steel
Thickness 1 5/16" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14" Working pressure of plate by rules 230 lbs
Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 3/4" Material of tube plates Steel Thickness: Front 1 5/16" Back 3 7/32" Mean pitch of stays 9 1/4"
Pitch across wide water spaces 14" Working pressures by rules 195 lbs Girders to Chamber tops: Material Iron Depth and
thickness of girder at centre 9 1/2" x 13 1/4" Length as per rule 2'-10" Distance apart 7 3/4" Number and pitch of Stays in each 3 ~ 7 1/8"
Working pressure by rules 200 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
Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
Stays 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

010391-010404-0263



4/17646

**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 casing 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 \_\_\_\_\_ Plates \_\_\_\_\_ 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 & bilge pump valves, a quantity of assorted bolts, nuts &c.

The foregoing is a correct description,

FOR **AMOS & SMITH**

Manufacturer.

*M. F. Hyde*  
MANAGER

Dates of Survey while building

During progress of work in shops—	}	1905:—	May 19.	Jun 7.	Aug 16.	21.	24.	Sep 4.	11.	25.	Oct 2.	9.	18.	23.	30.	Nov 6.	15.	20.	27.	Dec 4.	12.		
		During erection on board vessel—	}	1906:—	Jan 4.	10.	15.	16.	22.	23.	24.	26.	29.	Feb 6.	10.	13.	20.	23.	26.	Mar 1.	6.	7.	13.
				Total No. of visits	38																		

Is the approved plan of main boiler forwarded herewith

No it was sent on with the Rpt No 17566

**General Remarks** (State quality of workmanship, opinions as to class, &c. The machinery and boiler of this vessel have been inspected during construction in accordance with the Society's Rules. The materials & workmanship are sound and 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. 3.06 in the Register Book.

The engines and boiler of this vessel are similar to those fitted on the "Cleopatra" Hull Rpt. No 17566.

It is submitted that this vessel is eligible for THE RECORD H.L.M.C. 3.06.

*Am.S.*  
16.3.06

The amount of Entry Fee..	£ 1 : - : -	When applied for, 15/3/1906
Special .. .. .	£ 14 : 8 : -	
Donkey Boiler Fee .. .. .	£ - : - : -	When received, 2-4-06
Travelling Expenses (if any)	£ - : - : -	31.3.06

*James Barclay*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.  
14.3.06

Committee's Minute TUES. 20 MAR 1906  
Assigned + L.M.C. 3.06



MACHINERY CERTIFICATE WRITTEN

Hull

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