

Port of *Hull*Received at London Office *18 MAR 1906*

No. in Survey held at *Hull* Date, first Survey *May 19th* Last Survey *13 Mar 1906*
 Reg. Book. *72 Supp on the* *Steel S. K. King Lear* (Number of Visits *38*)
 Master *Hull* Built at *Hull* By whom built *Messrs Earle's & Co Ltd* Tons *Gross 311*
Net 119 When built *1906*
 Engines made at *Hull* By whom made *Messrs Amos Smith* when made *1906*
 Boilers made at *Hull* By whom made *Messrs Amos Smith* when made *1906*
 Registered Horse Power *96* 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 *8.95"* Material of *Iron*
 as per rule *8.95"* as fitted *8.74"* 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 *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 *7.18"* as per rule *7.18"* as fitted *7.14"* Dia. of Crank shaft journals *7.54"* as per rule *7.54"* as fitted *8"* 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 1/2"* Stroke *18"* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *Two* Diameter of ditto *2 1/2"* 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 *Yes* size *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 *Yes* 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 in* 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"* Mean dia. of boilers *14' 0"* Length *10-7 1/2'* Material of shell plates *Steel*
 Thickness *1 1/2"* Range of tensile strength *28-32 tons* Are they welded or flanged *Yes* Descrip. of riveting: cir. seams *L. D.* long. seams *O. B. S. J. R.*
 Diameter of rivet holes in long. seams *1 1/32"* Pitch of rivets *8.72"* Lap of plates or width of butt straps *18 3/4"*
 Per centages of strength of longitudinal joint *95.1* Working pressure of shell by rules *185 lbs* Size of manhole in shell *16" x 12"*
 Size of compensating ring *40 x 30 x 1 1/2"* No. and Description of Furnaces in each boiler *3 Plain* Material *Steel* Outside diameter *41 1/8"*
 Length of plain part *5' 10 7/8"* Thickness of plates *1 1/2"* crown *49"* bottom *64"* Description of longitudinal joint *Welded* No. of strengthening rings *0*
 Working pressure of furnace by the rules *191 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *1 1/8"* Back *1 1/8"* Top *1 1/8"* Bottom *1 1/8"*
 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 in* Working pressure by rules *214 lbs* End plates in steam space:
 Material *Steel* Thickness *1 1/8"* Pitch of stays *18" x 15 1/2"* How are stays secured *secured into both ends* Working pressure by rules *191 lbs* Material of stays *Steel*
 Diameter at smallest part *6.10* Area supported by each stay *279 sq in* Working pressure by rules *218 lbs* Material of Front plates at bottom *Steel*
 Thickness *1 1/8"* Material of Lower back plate *Steel* Thickness *1 1/8"* 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 1/8"* Back *3/32"* 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 *Yes* Diameter *14"* Length *14"* Thickness of shell plates *1 1/8"* Material *Steel* Description of longitudinal joint *Welded* Diam. of rivet
 Pitch of rivets *8"* Working pressure of shell by rules *195 lbs* Diameter of flue *14"* Material of flue plates *Steel* Thickness *1 1/8"*
 Stiffened with rings *Yes* Distance between rings *14"* Working pressure by rules *195 lbs* End plates: Thickness *1 1/8"* How stayed *By stays*
 Working pressure of end plates *200 lbs* Area of safety valves to superheater *1.5 sq in* Are they fitted with easing gear *Yes*

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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 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.

N.T. 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 Hull Rpt 7817566

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. 7817566.

It is submitted that this vessel is eligible for THE RECORD **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, 31.3.06
Travelling Expenses (if any) £	- : - : -	

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