

REPORT ON MACHINERY.

No. 17567

Port of *Hull*

RECEIVED 20 FEB 1905

Received at London Office

No. in Survey held at *Hull* Date, first Survey *May 19/05* Last Survey *17th Feb 1906*
 Reg. Book. *465* on the *Steel S. K. Hamlet* (Number of Visits *41*)
 Master *Hull* Built at *Hull* By whom built *Messrs Earles & Co Ltd* 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 *Hollers' Str Fishing Co Ltd* Port belonging to *Hull*
 Nom. Horse Power as per Section 28 *96* Is Refrigerating Machinery fitted *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 *7.91"* 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 *1 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*
 Dia. of *plain* screw 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 1/2 x 5"* Dia. of thrust shaft under collars *8"* Dia. of screw *9" - 9"* Pitch of screw *11' - 6" 6 12' - 6"* No. of blades *4* State whether moveable *No* Total surface *30.6 sq ft*
 Length of stern bush *40"*
 No. of Feed pumps *2* Diameter of ditto *2 7/8"* Stroke *18"* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *2* Diameter of ditto *2 7/8"* Stroke *18"* Can one be overhauled while the other is at work *Yes*
 No. of Donkey Engines *One* Sizes of Pumps *6 1/2" x 6" x 6"* No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room *Two 2"* In Holds, &c. *1 - 2" to fish hold, 1 - 2" to fore peak*
jector suction from eng. room bilge holds, with discharge on deck
 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 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 *3*) 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 *12.12.05* 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 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 5/32"* Range of tensile strength *28 - 32 tons* 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 15 1/2"* No. and Description of Furnaces in each boiler *3 plain* Material *Steel* Outside diameter *41 10/16"*
 Length of plain part top *5' - 10 7/8"* Thickness of plates crown *4 9/16"* Description of longitudinal joint *Welded* No. of strengthening rings *0*
 bottom *6 1/4"* Working pressure of furnace by the rules *191 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *7/16"* Back *7/16"* Top *7/16"* Bottom *7/16"*
 Pitch of stays to ditto: Sides *8 3/4" x 7 1/2"* Back *8" x 8 1/4"* Top *7 1/2" x 7 1/2"* 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: *screwed into end plates*
 Material *Steel* Thickness *1 1/16"* Pitch of stays *18" x 15 1/2"* How are stays secured *nut in, out washer out* Working pressure by rules *191 lbs* Material of stays *Steel*
 Diameter at smallest part *6.10 sq in* Area supported by each stay *279 sq in* 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 *15/16"* Back *27/32"* Mean pitch of stays *9 1/2"*
 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 1 3/4"* 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 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

Lloyd's Register
 Foundation
 W703-0023

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 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 and bilge pump valves, and a quantity of assorted bolts nuts etc.

The foregoing is a correct description,

Manufacturer. **W.F. Hyde** **MANAGER**

Dates of Survey while building

During progress of work in shops— 1905:— May 19 June 7. 16. 29 July 5. 7. 13. 24. Aug 16. 21. 24. Sep 4. 11. 25. Oct 2. 9. 18. 23. 30. Nov 6. 15.

During erection on board vessel— Nov 20. 27. Dec 4. 8. 12. 21. 29. 1906:— Jan 4. 10. 15. 23. 24. 27. 29. Feb 1. 5. 7. 8. 14. 17.

Total No. of visits 41

Is the approved plan of main boiler forwarded herewith No it was sent on with Hull Report No 17566

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

The machinery and boiler of this vessel, have been inspected throughout, construction in accordance, with the Society's Rules. The materials & 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 and safe working condition and respectfully submitted as being eligible in my opinion to be classed with the notation of **L.M.C. 2.06** in the Register Book.

This machinery and boiler are similar to that on the "Cleopatra" Hull Report No 17566.

It is submitted that this vessel is eligible for **THE RECORD L.M.C. 2.06**

W.F. Hyde
20.2.06

The amount of Entry Fee.. £ 1 : When applied for, 19/2/06

Special £ 14 : 8 :

Donkey Boiler Fee £ . : When received, 29/2/06

Travelling Expenses (if any) £ . :

James Barclay
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
17.2.06

Committee's Minute **FRI, 23 FEB 1906**

Assigned **L.M.C. 2.06**



MACHINERY CERTIFICATE WRITTEN.

Certificate (if required) to be sent to Hull

The Surveyors are requested not to write on or below the space for Committee's Minute.