

REPORT ON MACHINERY.

No. 26774
MON. OCT. 6 - 1913

Received at London Office

Date of writing Report *1st Oct* 1913. When handed in at Local Office *2/10/13* Port of *Port of Hull*
 No. in Survey held at *Sup. H. on the S.S. "Bridlington"*
 Reg. Book. *2/10/13* Date, First Survey *Apr 25th* Last Survey *Sep. 24th 1913*
 (Number of Visits *22*) Tons { Gross *205* Net *82*
 Master *Hull* Built at *Hull* By whom built *Bochman & Sons Ltd* When built *1913*
 Engines made at *Hull* By whom made *C. D. Holmes & Co.* when made *1913*
 Boilers made at *Hull* By whom made *C. D. Holmes & Co.* when made *1913*
 Registered Horse Power *50* Owners *Hull Sta. Fishing & Ice Co. Ltd* Port belonging to *Hull*
 Nom. Horse Power as per Section 28 *50* 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 *10-17-28* Length of Stroke *24* Revs. per minute *as per rule 7 1/4"* Material of screw shaft *as fitted 7 5/8"*
 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 *no* 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 *no*
 If two liners are fitted, is the shaft lapped or protected between the liners *no* Length of stern bush *36"*
 Dia. of Tunnel shaft *as per rule 5-76* Dia. of Crank shaft journals *as per rule 6-05"* Dia. of Crank pin *6 1/2"* Size of Crank webs *4" x 12 1/4"* Dia. of thrust shaft under collars *6 1/2"* Dia. of screw *10-6* Pitch of Screw *8-6"* No. of Blades *4* State whether moveable *no* Total surface *30"*
 No. of Feed pumps *1* Diameter of ditto *2 1/4"* Stroke *11"* Can one be overhauled while the other is at work *yes*
 No. of Bilge pumps *1* Diameter of ditto *2 1/4"* Stroke *11"* Can one be overhauled while the other is at work *yes*
 No. of Donkey Engines *1* 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 2" One forward, one aft.* In Holds, &c. *One 2" to Main hold, one 2" to fore-castle, 3" ejector*
 No. of Bilge Injections *1* sizes *3"* Connected to condenser, or to circulating pump *no* Is a separate Donkey Suction fitted in Engine room of size *3" ejector*
 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 *no*
 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 Suctions* 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*
 Dates of examination of completion of fitting of Sea Connections *5.7.13* of Stern Tube *5.7.13* Screw shaft and Propeller *5.7.13*
 Is the Screw Shaft Tunnel watertight *yes* Is it fitted with a watertight door *no* worked from *no*

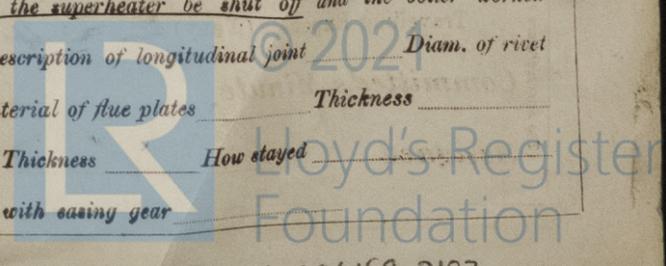
BOILERS, &c.—(Letter for record *3*) Manufacturers of Steel *Messrs Phoenix & Alder Horder Verein, Harde*
 Total Heating Surface of Boilers *835* Is Forced Draft fitted *no* No. and Description of Boilers *One Single-ended*
 Working Pressure *200lbs.* Tested by hydraulic pressure to *400lbs.* Date of test *30.8.13* No. of Certificate *2010*
 Can each boiler be worked separately *yes* Area of fire grate in each boiler *27.37* No. and Description of Safety Valves to each boiler *Two spring loaded*
 Area of each valve *3.14* Pressure to which they are adjusted *200lbs.* Are they fitted with easing gear *yes*
 Smallest distance between boilers or uptakes and bunkers or woodwork *8"* Mean dia. of boilers *10-9* Length *9-3* Material of shell plates *S*
 Thickness *3/32"* Range of tensile strength *29* Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *10.R*
 long. seams *R.O.B.* Diameter of rivet holes in long. seams *1 1/16"* Pitch of rivets *7 1/4"* Lap of plates or width of butt straps *16 1/4"*
 Per centages of strength of longitudinal joint: rivets *93.9* Working pressure of shell by rules *203* Size of manhole in shell *16 x 12*
 plate *85.3* Size of compensating ring *7" x 3 1/2"* No. and Description of Furnaces in each boiler *2 plain* Material *S* Outside diameter *3-2 1/2*
 Length of plain part: top *5-9* Thickness of plates: crown *49* Description of longitudinal joint *welded* No. of strengthening rings *no*
 bottom *5-1 1/2* bottom *64* Working pressure of furnace by the rules *201* Combustion chamber plates: Material *S* Thickness: Sides *1/16* Back *3/32* Top *5/8* Bottom *11/16*
 Pitch of stays to ditto: Sides *8 1/2 x 8 1/2* Back *8 3/4 x 8 3/8* Top *7 1/2 x 8 1/2* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *202*
 Material of stays *S* Diameter at smallest part *2.07* Area supported by each stay *72* Working pressure by rules *290* End plates in steam space: Material *S* Thickness *15-11/16* Pitch of stays *13 1/2 x 13* How are stays secured *On x Ns* Working pressure by rules *237* Material of stays *S*
 Diameter at smallest part *4.3* Area supported by each stay *175.0* Working pressure by rules *255* Material of Front plates at bottom *S*
 Thickness *15/16* Material of Lower back plate *S* Thickness *15/16* Greatest pitch of stays *14 x 8 3/8* Working pressure of plate by rules *227*
 Diameter of tubes *3 1/4* Pitch of tubes *4 1/2 x 4 3/4* Material of tube plates *S* Thickness: Front *15/16* Back *7/8* Mean pitch of stays *9 1/2 x 9*
 Pitch across wide water spaces *13 3/4* Working pressures by rules *229* Girders to Chamber tops: Material *S* Depth and thickness of girder at centre *8 x 1 1/2* Length as per rule *29.875* Distance apart *7 1/2* Number and pitch of stays in each *2 - 8 1/2*
 Working pressure by rules *205* 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, she will be sent

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Im. 212. T.



VERTICAL DONKEY BOILER— Manufacturers of Steel

No.	Description		When made	Where fixed
Made at	By whom made		No. of Certificate	Fire grate area
Working pressure	tested by hydraulic pressure to	Date of test	Description of Safety	
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment
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
Working pressure of shell by rules	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
Working pressure of furnace by rules	Thickness of furnace crown plates		Radius of do.	Stayed by
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey	

SPARE GEAR. State the articles supplied:— *Two each top & bottom end connecting rod bolts nuts, two main bearing bolts nuts, one set of coupling bolts nuts, one set each feed & bilge pump valves, iron of various sizes, a quantity of assorted bolts, nuts, etc.*

The foregoing is a correct description,
p. pro CHARLES D. HOMES & CO. LTD. Manufacturer.

Arthur James DIRECTOR

Dates of Survey while building: During progress of work in shops: 1913. Apr 25. Jun 27. July 3. 5. 10. 16. 23. 25. 30. Aug 8. 15. 16. 19. 25. 29. 30. Sep 2. 3.
 During erection on board vessel: Sep 16. 19. 23. 24
 Total No. of visits: 22

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts—Cylinders 8.8.13. Slides 8.8.13. Covers 8.8.13. Pistons 23.7.13. Rods 15.8.13.
 Connecting rods 15.8.13. Crank shaft 29.8.13. Thrust shaft 2.9.13. Tunnel shafts ✓ Screw shaft 27.6.13. Propeller 27.6.13.
 Stern tube 27.6.13. Steam pipes tested 16.9.13. Engine and boiler seatings 5.7.13. Engines holding down bolts 16.9.13.
 Completion of pumping arrangements 16.9.13. Boilers fixed 16.9.13. Engines tried under steam 19.9.13.
 Main boiler safety valves adjusted 19.9.13. Thickness of adjusting washers *PV 3/8. SV 7/16.*
 Material of Crank shaft *S.* Identification Mark on Do. *1079* Material of Thrust shaft *S.* Identification Mark on Do. *1079.*
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts *S.* Identification Marks on Do. *1079.*
 Material of Steam Pipes *Solid drawn Copper!* Test pressure *400 lbs hyd. pres.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines & boiler of this vessel have been constructed under special survey in accordance with the rules. The materials & workmanship are sound & good. The boiler tested by hydraulic pressure, & with the engines secured on board steamed 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 notation of LMC 9.13 in the Register's book.*

It is submitted that this vessel is eligible for THE RECORD + LMC 9.13.

J.W.D.
 6/10/13

J.H. Mackintosh
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee .. £ 1 : : When applied for, 3/10.13
 Special .. £ 8 0 0 : :
 Donkey Boiler Fee .. : :
 Travelling Expenses (if any) £ : 4 : : When received, 31/10/13
 Committee's Minute TUE. OCT. 7 1913
 Assigned + LMC 9.13



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.