

REPORT ON MACHINERY.

No. 26666

Received at London Office

THU. AUG. 28. 1913

Date of writing Report 22nd Aug 1913 When handed in at Local Office 27-8 1913 Port of Hull.

No. in Survey held at Hull. Date, First Survey May 29th Last Survey Aug 18th 1913
 Reg. Book. 1115 on the Steel S.S.K. "Anthony Hope". (Number of Visits 17) Gross 298 Tons Net 115

Master Selby Built at Selby By whom built Cochrane & Co. Ltd When built 1913.

Engines made at Hull. By whom made C.D. Holmes & Co. Ltd when made 1913.

Boilers made at Hull. By whom made C.D. Holmes & Co. Ltd when made 1913.

Registered Horse Power 78 Owners Newington Stn. Trawling Co. Port belonging to Hull.

Nom. Horse Power as per Section 28 78 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 12 3/4 - 22 - 36 Length of Stroke 24 Revs. per minute ✓ Dia. of Screw shaft 8 as per rule 7 1/2 Material of screw shaft S.

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 ✓ 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 ✓ Length of stern bush 38

Dia. of Tunnel shaft 6.64 as per rule 6.78 Dia. of Crank shaft journals 7.007 as per rule 7.07 Dia. of Crank pin 7 1/2 Size of Crank web 4 1/2 x 4 1/2 Dia. of thrust shaft under collars 7 1/2 Dia. of screw 9 1/4 Pitch of Screw 11-6 No. of Blades 4 State whether moveable No Total surface 30 1/2

No. of Feed pumps 1 Diameter of ditto 2 1/2 Stroke 14 1/4 Can one be overhauled while the other is at work ✓

No. of Bilge pumps 1 Diameter of ditto 2 1/2 Stroke 14 1/4 Can one be overhauled while the other is at work ✓

No. of Donkey Engines 1 Sizes of Pumps 6" x 4 1/2" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2" and 3" ejector In Holds, &c. One 2" to after slush well, One 2" to fore slush well, One 2" to Main hold, One 2" to spare water, One 2" to fore castle.

No. of Bilge Injections 1 sizes 3 1/2 Connected to condenser, or to circulating pump ✓ Is a separate Donkey Suction fitted in Engine room & size yes, 3"

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 none

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

Dates of examination of completion of fitting of Sea Connections 5, 6, 13 of Stern Tube 5, 6, 13 Screw shaft and Propeller 5, 6, 13

Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Messrs. Phoenix & Co. Harde

Total Heating Surface of Boilers 1280 Is Forced Draft fitted No No. and Description of Boiler One single-ended multi-tubular

Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 30.7.13 No. of Certificate 1999

Can each boiler be worked separately ✓ Area of fire grate in each boiler 45 No. and Description of Safety Valves to each boiler 2. Spring loaded Area of each valve 4.9 Pressure to which they are adjusted 205 lbs. Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 7 Mean dia. of boilers 13-6 Length 10-6 Material of shell plates S.

Thickness 1 1/2 Range of tensile strength 29 tons Are the shell plates welded or flanged ✓ Descrip. of riveting: cir. seams W.R.L. long. seams T.R. W.B. Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8 Lap of plates or width of butt straps 18

Per centages of strength of longitudinal joint rivets 88.8 Working pressure of shell by rules 202 Size of manhole in shell 16" x 12

Size of compensating ring 7" x 1 1/2" No. and Description of Furnaces in each boiler 3. plain Material S. Outside diameter 38"

Length of plain part top 6-3 1/2 bottom 5-6 Thickness of plates crown 5 1/2 bottom 6 1/4 Description of longitudinal joint welded No. of strengthening rings ✓

Working pressure of furnace by the rules 215 Combustion chamber plates: Material S. Thickness: Sides 1 1/16 Back 2 3/32 Top 1 1/16 Bottom 2 3/32

Pitch of stays to ditto: Sides 9 3/8 x 8 1/4 Back 9 3/8 x 7 3/8 Top 9 x 8 1/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 210

Material of stays S. Diameter at smallest part 2.07 Area supported by each stay 7.2 Working pressure by rules 243 End plates in steam space: Material S. Thickness 1 1/16 Pitch of stays 20" x 18" How are stays secured Nuts & Nuts Working pressure by rules 204 Material of stays S.

Diameter at smallest part 3.76 Area supported by each stay 360 Working pressure by rules 288 Material of Front plates at bottom S.

Thickness 1/32 Material of Lower back plate S. Thickness 1 1/16 Greatest pitch of stay 13 1/4 x 9 1/8 Working pressure of plate by rules 230

Diameter of tubes 3 1/2 Pitch of tubes 5" x 5 1/2" Material of tube plates S. Thickness: Front 1 1/32 Back 7/8 Mean pitch of stays 11" x 10"

Pitch across wide water spaces 14 Working pressures by rules 208 Girders to Chamber tops: Material S. Depth and thickness of girder at centre 10 1/4" x 1 3/4" Length as per rule 36 3/32 Distance apart 9 Number and pitch of stays in each 3-8 1/4"

Working pressure by rules 206 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 ✓

VERTICAL DONKEY BOILER— *Manufacturers of Steel*

No.	Description				
Made at	By whom made	When made	Where fixed		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
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	
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 different sizes, a quantity of assorted bolts, nuts etc.*

The foregoing is a correct description,

Harold Shearman *BOSTON* Manufacturer.

Dates of Survey while building: During progress of work in shops - 1913: May 29, June 5, 19, 27, 30, July 3, 10, 18, 23, 25, 29, 30, Aug. 8, 9, 11, 12. During erection on board vessel - Aug 13. Total No. of visits 17.

Is the approved plan of main boiler forwarded *with* *Rf. No 26221* *Stamly Weyman*

Dates of Examination of principal parts—Cylinders 23.7.13. Slides 23.7.13. Covers 23.7.13. Pistons 23.7.13. Rods 23.7.13. Connecting rods 23.7.13. Crank shaft 18.7.13. Thrust shaft 25.7.13. Tunnel shafts ✓ Screw shaft 29.5.13. Propeller 29.5.13. Stern tube 29.5.13. Steam pipes tested 8.8.13. Engine and boiler seatings 5.6.13. Engines holding down bolts 11.8.13. Completion of pumping arrangements 11.8.13. Boilers fixed 9.8.13. Engines tried under steam 12.8.13. Main boiler safety valves adjusted 12.8.13. Thickness of adjusting washers *For val. 3/8" AV 1/32"*

Material of Crank shaft *S* Identification Mark on Do. 1154. Material of Thrust shaft *S* Identification Mark on Do. 1154. Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts *S* Identification Marks on Do. 1154. Material of Steam Pipes *Copper solid drawn* Test pressure *400 lbs. hyd. pressure.*

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 material & workmanship are sound & good. The boiler tested by hydraulic pressure and with the engines secured on board & tested under steam they are in good order, & safe working condition, & respectfully submitted as being eligible in my opinion to be classed with the notation of +LMC 8.13 in the Register book.*

It is submitted that this vessel is eligible for THE RECORD, + LMC 8.13.

JWD
28/8/13

The amount of Entry Fee .. £ 1 : : When applied for.
Special £ 11 : 14 : 6 *27.8.13*
Donkey Boiler Fee £ : : :
Travelling Expenses (if any) £ : 8 : 2 *29.8.13*

J. G. MacKillop
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute *FRI. AUG. 29. 1913*
Assigned *+ LMC 8.13*

Certificate (if required) to be sent to Hull

ORIGINAL CERTIFICATE WRITTEN.

