

REPORT ON MACHINERY.

No. 55317

FRI 4 SEP 1908

Port of Newcastle

Received at London Office

No. in Survey held at Newcastle
Reg. Book.

Date, first Survey May 8th 07 Last Survey Aug 24th 08
(Number of Visits 69.71)

on the S.S. "Galileo"

Master J.R. Watson Built at Newcastle By whom built Northumbreland S.B.Co 151 When built 1908

Engines made at Newcastle By whom made Palmer Co (Eng No 776) when made 1908

Boilers made at do By whom made do when made 1908

Registered Horse Power _____ Owners Thomas Wilson Sons & Co Port belonging to Hull

Nom. Horse Power as per Section 28 567 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Quadruple expansion No. of Cylinders 4 No. of Cranks 4
 Dia. of Cylinders 25 1/2 - 36 1/2 - 52 - 75 Length of Stroke 54 Revs. per minute 70 Dia. of Screw shaft 16.13 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 Yes 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 Yes
 If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5'-8"
 Dia. of Tunnel shaft 14.18 Dia. of Crank shaft journals 14.88 Dia. of Crank pin 15 1/4 Size of Crank webs 22 1/2 x 10 1/2 Dia. of thrust shaft under collars 15 1/4 Dia. of screw 20'-0" Pitch of Screw 19'-3" No. of Blades 4 State whether moveable No Total surface 106 sq
 No. of Feed pumps 2 Diameter of ditto 10 1/2 x 8 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 27 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 13' x 11' x 12' & 7 1/2' x 4 1/2' x 10' No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Four, 3 1/2" In Holds, &c. No 1 hold 2-3 1/2", No 2 hold 2-3 1/2", No 3 hold 2-3 1/2", No 4 hold 2-3 1/2", Tunnel well 1-2 1/2"
 No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room of size 7"
 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 None How are they protected Yes
 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 21/10/07 of Stern Tube 21/10/07 Screw shaft and Propeller 21/10/07
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top platform.

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel J. Spence & Sons
 Total Heating Surface of Boilers 7636 sq Is Forced Draft fitted Yes No. and Description of Boilers Three, single ended
 Working Pressure 220 lbs Tested by hydraulic pressure to 440 lbs Date of test 21/10/07 No. of Certificate 7613
 Can each boiler be worked separately Yes Area of fire grate in each boiler 60.1 sq No. and Description of Safety Valves to each boiler Two, Spring
 Area of each valve 8.29 sq Pressure to which they are adjusted 225 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers uptakes and bunkers or woodwork 1'-4" Mean dia. of boilers 15'-0" Length 11'-6" Material of shell plates Steel
 Thickness 1 1/2" Range of tensile strength 29-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams 8. Lap
 long. seams S.S. & Riv. Diameter of rivet holes in long. seams 1 1/32" Pitch of rivets 9 7/8" Lap of plates or width of butt straps 22 1/8"
 Per centages of strength of longitudinal joint rivets 92.3 Working pressure of shell by rules 235 lbs Size of manhole in shell 16 x 12
 plate 84.5
 Size of compensating ring Flanged No. and Description of Furnaces in each boiler 3, Molsons Material Steel Outside diameter 3'-10 3/4"
 Length of plain part top 5 1/8" Thickness of plates crown 5 1/8" Description of longitudinal joint Welded No. of strengthening rings Yes
 bottom 5 1/8"
 Working pressure of furnace by the rules 220 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 23/32" Top 23/32" Bottom 1 1/16"
 Pitch of stays to ditto: Sides 8' x 8' Back 7 7/8' x 7 7/8' Top 8' x 7 3/4' If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 280 lbs
 Material of stays Steel Diameter at smallest part 2.03 sq Area supported by each stay 64 sq Working pressure by rules 286 lbs End plates in steam space: Area
 Material Steel Thickness 1 1/32" Pitch of stays 17 1/2' x 15' How are stays secured S. N. & W. Working pressure by rules 296 lbs Material of stays Steel
 Diameter at smallest part 7.24 sq Area supported by each stay 262 sq Working pressure by rules 276 lbs Material of Front plates at bottom Steel
 Thickness 1 1/2" Material of Lower back plate Steel Thickness 1" Greatest pitch of stays 14 1/4" Working pressure of plate by rules 254 lbs
 Diameter of tubes 2 1/2" Pitch of tubes 3 3/4' x 3 5/8' Material of tube plates Steel Thickness: Front 1 1/16" Back 3/32" Mean pitch of stays 7 3/8"
 Pitch across wide water spaces 14" Working pressures by rules 221 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/2' x 2" Length as per rule 32 5/16" Distance apart 7 3/4" Number and pitch of stays in each 3-8"
 Working pressure by rules 220 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes
 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, one will be sent? Is a Report also sent on the Hull of the Ship?

W619-0014



