

REPORT ON MACHINERY.

No. 6634

Received at London Office

MONDAY 8th SEPT 1884

No. in Survey held at Glasgow

Date, first Survey 27th Sept 1883 Last Survey 4th Sept 1884

Reg. Book.

(Number of Visits 32)

Tons 1475.42
949.44

on the S. S. "Atlantis."

Master J. Wandle Built at Glasgow By whom built J. & G. Thomson When built 1884

Engines made at Glasgow By whom made do when made do

Boilers made at do By whom made do when made do

Registered Horse Power 120 Owners Scrutton Sons & Co. Port belonging to London

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting

Diameter of Cylinders 30" & 156" Length of Stroke 36" No. of Rev. per minute 75 Point of Cut off, High Pressure Var Low Pressure —

Diameter of Screw shaft 10 1/2" Diam. of Tunnel shaft 9 3/4" Diam. of Crank shaft journals 10 1/2" Diam. of Crank pin 10 1/2" size of Crank webs 6 1/2" x 42"

Diameter of screw 13'-0" Pitch of screw 15'-0" No. of blades 4 state whether moveable Yes total surface 58 ft

No. of Feed pumps 2 diameter of ditto 4" Stroke 18" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 diameter of ditto 4" Stroke 18" Can one be overhauled while the other is at work Yes

Where do they pump from All Compartments

No. of Donkey Engines One Size of Pumps 4" x 9" stroke Where do they pump from Sea, Hotwell & Bilges

Are all the bilge suction pipes fitted with roses Yes Are the roses always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes

No. of bilge injections One and sizes 3 1/2" Are they connected to condenser, or to circulating pump Circ pump

How are the pumps worked by levers

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 For-bilge suction How are they protected wood flooring

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges Yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock on stocks before launching

Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from upper platform

BOILERS, &c.—

Number of Boilers One Description Round Horizontal Whether Steel or Iron Steel

Working Pressure 90 lbs Tested by hydraulic pressure to 180 lbs Date of test 23rd May 1884

Description of superheating apparatus or steam chest Horizontal dome

Can each boiler be worked separately — Can the superheater be shut off and the boiler worked separately —

No. of square feet of fire grate surface in each boiler 95 Description of safety valves d. Spring No. to each boiler Two

Area of each valve 23.75" Are they fitted with easing gear Yes No. of safety valves to superheater — area of each valve —

Are they fitted with easing gear — Smallest distance between boilers and bunkers or woodwork 12" Diameter of boilers 12'-10 1/2"

Length of boilers 15'-0" description of riveting of shell long. seams reb. butt circum. seams d. lap Thickness of shell plates 13/16"

Diameter of rivet holes 15/16" whether punched or drilled drilled pitch of rivets 4 1/2" Lap of plating —

Per centage of strength of longitudinal joint 77 working pressure of shell by rules 100 lbs size of manholes in shell 16" x 12"

Size of compensating rings Angle Iron 4 1/2" x 4 1/2" x 5/8" No. of Furnaces in each boiler Six

Outside diameter 3'-3" length, top 5'-6" bottom through thickness of plates 1/2" description of joint d. butt if rings are fitted L Iron

Greatest length between rings 5'-6" working pressure of furnace by the rules 100 lbs combustion chamber plating, thickness, sides 1/2" back — top 1/2"

Pitch of stays to ditto, sides 8" x 8 1/2" back — top Girders stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 100 lbs

Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 104 lbs end plates in steam space, thickness 27/32"

Pitch of stays to ditto 17" x 17" how stays are secured d. nuts & riv. w. working pressure by rules 100 lbs diameter of stays at smallest part 2 3/8" working pressure by rules 90 lbs Front plates at bottom, thickness 5/8" Back plates, thickness 5/8"

Greatest pitch of stays — working pressure by rules — Diameter of tubes 3" pitch of tubes 4 1/2" thickness of tube plates, front 19/16" back 19/16" how stayed d. tubes pitch of stays 13 1/2" x 9" width of water spaces 5 1/2" x 4 1/2"

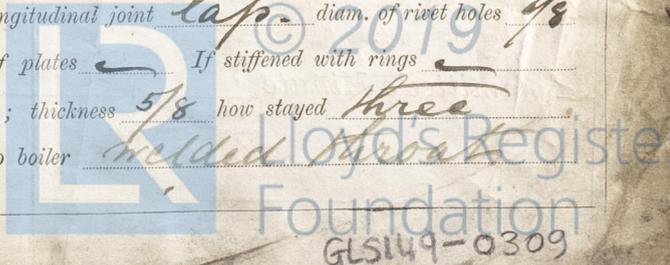
Diameter of Superheater or Steam chest 36" length 10'-0" thickness of plates 5" description of longitudinal joint lap diam. of rivet holes 7/8"

Pitch of rivets 2 3/4" working pressure of shell by rules 203 lbs diameter of flue — thickness of plates — If stiffened with rings —

Distance between rings — working pressure by rules — end plates of superheater, or steam chest; thickness 5/8" how stayed three

Stays 2 1/4" dia well dished Superheater or steam chest; how connected to boiler welded

Form No. 8—2000—22/5/83.



GLS149-0309

6634 G

DONKEY BOILER— Description *Round Vertical*
 Made at *Glasgow* by whom made *J & G. Thomson* when made *1884* where fixed *fore & ake how*
 Working pressure *both* tested by hydraulic pressure to *120 lbs*. No. of Certificate *1373*. fire grate area *22 ft²* description of safety
 valves *d. Spring* No. of safety valves *2* area of each *4"* if fitted with easing gear *Yes* if steam from main boilers can
 enter the donkey boiler No. diameter of donkey boiler *6'-0"* length *13'-0"* description of riveting *double lap*
 Thickness of shell plates *3/8"* diameter of rivet holes *3/4"* whether punched or drilled *rim* pitch of rivets *3"* lap of plating *3 1/4"*
 per centage of strength of joint *75* thickness of crown plates *1/2"* stayed by *5 stays 1 1/2" diameter*
 Diameter of furnace, top *4'-6 1/2"* bottom *5'-3"* length of furnace *5'-11"* thickness of plates *1/2"* description of joint *lap*
 Thickness of furnace crown plates *1/2" steel* stayed by *as above* working pressure of shell by rules *78 lbs*
 Working pressure of furnace by rules *64 lbs* diameter of uptake *15"* thickness of plates *3/8"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *2 Prop. Blades. 2 Valve Rods. 1 Air pump rod. 1 Air pump link
 link for Engine Crosshead. 1 set coupling bolts. 1 set main bearing Bolts. 1 Air pump motion link for pump crosshead
 1 set connecting rod bolts for both top & bottom ends. 1 set each, Feed & Waste pumps Valves. 1 Safety Valve spring for Main Boiler
 12 Main Boiler tubes, 1 Main Boiler stay tube with nuts complete. Usual assortment of Bolts & nuts.*
 The foregoing is a correct description,
Mrs. James & Geo. Thomson Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *The above mentioned
 Engines and Boilers are now completed & bound in
 a satisfactory manner & the machinery is now
 in my opinion in a safe & good working condition
 and eligible to be noted in the Society's Register.*

L.M.C. 9. 84

*Tracing of boiler attached to report
 to Burgess no 6156.*
*As submitted that this
 vessel is eligible to have
 its registration & L.M.C. records
 M 8/9/84*

The amount of Entry Fee £ *2: 0: 0* received by me,
 Special .. £ *18: 0: 0*
 Donkey Boiler Fee .. £ *0: 0: 0*
 Certificate (if required) .. £ *0: 0: 0* 5/9/1884
 (To be sent as per margin.)
 (Travelling Expenses, if any, £ ..)

John Sanderson
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUESDAY 9 SEPT 1884

[Signature]

