

REPORT ON MACHINERY.

MON. DEC 9 1901

Port of *Sunderland*No. in Survey held at *Sunderland*
Reg. Book.Date, first Survey *29th Jan'y*

Received at London Office

Last Survey *25th Nov 1901*(Number of Visits *3*)on the *Screw Steamer "Corinthia"*Master *Miller*Built at *Sunderland*By whom built *J. L. Thompson & Sons*

(391)

Gross *3625*Net *2359*When built *1901*Engines made at *Sunderland*By whom made *John Dickinson & Sons Ltd*when made *1901*Boilers made at *Sunderland*By whom made *John Dickinson & Sons Ltd*when made *1901*

Registered Horse Power

Owners *International Rule of Sea*Port belonging to *Whitby*Nom. Horse Power as per Section 28 *306 299*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 *24½-40-66*Length of Stroke *45*Revs. per minute *70*Dia. of Screw shaft *12.8*Lgth. of stern bush *4'-6"*Dia. of Tunnel shaft *11.6*Dia. of Crank shaft journals *12.8*Dia. of Crank pin *13*Size of Crank webs *Patent*Dia. of thrust shaft under collars *13"*Dia. of screw *16'-9"*Pitch of screw *17'-0"*No. of blades *4*State whether moveable *No*Total surface *77½ sq ft*No. of Feed pumps *2*Diameter of ditto *3½"*Stroke *22½"*Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *2*Diameter of ditto *4½"*Stroke *22½"*Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *4*Sizes of Pumps *two 8½" x 5" x 8"*No. and size of Suctions connected to both Bilge and Donkey pumps *two 8½" to each hold, Port & Starboard*In Engine Room *3½" Centre, 3½" port, 3½" starboard*In Holds, &c. *two 8½" to each hold, Port & Starboard*No. of bilge injections *1* sizes *4"*Connected to condenser, or to circulating pump *CP*Is a separate donkey suction fitted in Engine room & size *Yes 4"*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 *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*When were stern tube, propeller, screw shaft, and all connections examined in dry dock *Nov 1901*Is the screw shaft tunnel watertight *Yes*Is it fitted with a watertight door *Yes*worked from *Top Platform*

BOILERS, &c.—

(Letter for record *3*)Total Heating Surface of Boilers *4580 sq ft*Is forced draft fitted *No*No. and Description of Boilers *3 S. E. G. L. Multitubular*Working Pressure *160 lb*Tested by hydraulic pressure to *320 lb*Date of test *20.8.01*Can each boiler be worked separately *Yes*Area of fire grate in each boiler *44½ sq ft*No. and Description of safety valves to each boiler *two, direct spring*Area of each valve *5.95 sq in*Pressure to which they are adjusted *165 lb*Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *5'-0" for Bunkers*Mean dia. of boilers *18'-3"*Length *10'-3"*Material of shell plates *Steel*Thickness *1"*Range of tensile strength *28-32*Are they welded or flanged *No*Descrip. of riveting: cir. seams *5 Riv Lap*long. seams *in R. & B. S*Diameter of rivet holes in long. seams *1½"*Pitch of rivets *7½"*Lap of plates *16½"*width of butt straps *16½"*Per centages of strength of longitudinal joint *85-2%*Working pressure of shell by rules *163 lb*Size of manhole in shell *16" x 12"*Material *Steel*Size of compensating ring *8½ x 1"*No. and Description of Furnaces in each boiler *3 plain*Material *Steel*Outside diameter *39"*Length of plain part *top 6'-5"*Thickness of plates *bottom 7'-1½"*Description of longitudinal joint *weld*No. of strengthening rings *none*Material *Steel*Working pressure of furnace by the rules *167 lb*Combustion chamber plates: Material *Steel*Thickness: Sides *16"*Back *16"*Top *16"*Bottom *1"*Pitch of stays to ditto: Sides *10x10"*Back *10x10"*Top *10x9"*If stays are fitted with nuts or riveted heads *nuts*Working pressure by rules *163 lb*Material of stays *Steel*Diameter at smallest part *2.03"*Area supported by each stay *100 sq in*Working pressure by rules *160 lb*End plates in steam space: *area*Material *Steel*Thickness *1½"*Pitch of stays *16x19"*How are stays secured *8.4 x 10*Working pressure by rules *163 lb*Material of stays *Steel*Diameter at smallest part *6.05"*Area supported by each stay *304 sq in*Working pressure by rules *166 lb*Material of Front plates at bottom *Steel*Thickness *¾"*Material of Lower back plate *Steel*Thickness *¾"*Greatest pitch of stays *11½ x 10"*Working pressure of plate by rules *163 lb*Diameter of tubes *3½"*Pitch of tubes *4½"*Material of tube plates *Steel*Pitch across wide water spaces *18½"*Working pressures by rules *222 lb*Girders to Chamber tops: Material *Steel*Depth and thickness of girder at centre *6' x 1" x (2)*Length as per rule *27½"*Distance apart *9"*Working pressure by rules *164 lb*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 *✓*

Lloyd's Register

Foundation

W630-0103

DONKEY BOILER— No. Description *None Fitted*

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 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 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 top end bolts & nuts, two bottom end bolts and nuts, two main bearing bolts & nuts. Spare coupling bolts & nuts. Spare feed & bilge pump valves, assorted iron bolts & nuts.*

The foregoing is a correct description,
John Dickinson & Sons, Limited. Manufacturer.

Dates During progress of work in shops - -
 of Survey while building During erection on board vessel - -
 Total No. of visits *31.*

1901. - Jan'y 29. 30. Feb 8. 12. 20. Mar 11. 14. 19. 26 Apr 2. 4. 26. May 3. 4. 6. 20. 21. 22. June 3 July 22. 29. Augst 1. 12. 20. Oct 4. 7. 10. 14. 31. Nov 7. 25

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

" " " donkey " " "

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

Material of screw shaft *Wrot Iron* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *no*

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 *Two liners. Shaft painted*

The Machinery built under Special Survey. The material and workmanship good and efficient.

The main boilers and steam pipes tested under hydraulic pressure to 320 lbs per square inch and found sound & efficient in every respect at pressure.

The Engines tried under steam at their working pressures and found sound & satisfactory.

In my opinion this vessel is worthy of the notation
R M C. 11. 01 - in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 11. 01

The amount of Entry Fee. £ *3* : : When applied for, *7. 12. 01*

Special £ *35* : : *19. 01*

Donkey Boiler Fee £ : : When received, *10. 12. 01*

Travelling Expenses (if any) £ : : *19. 01*

Committee's Minute

TUES. 10 DEC 1901

Assigned

Leonard G. Shallow
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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