

REPORT ON MACHINERY.

DONKEY BOILER— Description *Cylindrical Multitubular. See Separate Form*
 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 _____ if fitted with easing gear _____ if steam from main boilers or _____
 enter the donkey boiler _____ diameter of donkey boiler _____ length _____ description of riveting _____
 Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of plating _____
 per centage of strength of joint _____ thickness of crown plates _____ stayed by _____
 Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *2 Screw propeller blades (Phos. Bronze), 1 length of crank shaft (Pickers steel); 1 propeller shaft; 1 HP & MP piston complete; 1 HP piston valve, 1 MP slide valve & loose face; 1 L.P. slide valve; 3 slide valve spindles; 1 set of brasses, bolts & nuts for both ends of Connect. rod; 1 set of springs for M. & L.P. pistons; 2 main bearing bolts; 3 sets of bolts; 24 fine ring bolts, 1 air pump bucket head & foot.*
 The foregoing is a correct description, _____ Manufacturer _____
Harland & Wolff

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

The Boilers and all parts of the Machinery of this vessel have been constructed and fitted in accordance with the plans approved of by the Committee, the Secretary's letters dated 22nd Sept. & 21st & 29th December 1886, the Rules or equivalent thereto for the Special Survey on New Machinery and to the satisfaction of the undersigned.

The Steel used in the construction has been tested in accordance with the Rules.

The shafting when finished was found free from defects. The materials used and the workmanship throughout are good & satisfactory.

The Boilers were tested by hydraulic pressure and the Machinery under steam pressure, when the Safety valves were adjusted to 750 lbs on main & 100 lbs per sq. inch on Auxiliary Boilers. The Boilers tried for accumulation pressure rising about 4th.

The Machinery in my opinion is eligible for the notification **+ L.M.C 2-88** and I would respectfully recommend that the same be assigned & recorded in the Society's Register Book.

It is submitted that this vessel is eligible to have **+ L.M.C 2-88** recorded.

The amount of Entry Fee *£ 3 : 3 : 0* received by me,
 Special *£ 70 : 0 : 0*
 Donkey Boiler Fee _____
 Certificate (if required) *£ 18.2.1888*
 (Travelling Expenses, if any, £ _____)

Committee's Minute *FRIDAY 21 FEB 1888*
+ L.M.C 2/88

James Claxton
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

REPORT ON MACHINERY.

3402

Port of *Belfast*
 No. in Survey held at *Belfast* Date, first Survey _____ Last Survey _____
 Reg. Book _____
 Sup on the *Auxiliary Boiler S.S. Oceana* Tons _____
 Master _____ Built at *Belfast*. By whom built *Harland & Wolff*. When built *1887/8*.
 Engines made at _____ By whom made _____ when made _____
 Boilers made at *Belfast*. By whom made *Harland & Wolff* when made *1887/8*.
 Registered Horse Power _____ Owners *Peninsular & Oriental S.N. Co.* Port belonging to _____

ENGINES, &c.—
 description of Engines _____
 Diameter of Cylinders _____ Length of Stroke _____ No. of Rev. per minute _____ Point of Cut off, High Pressure _____ Low Pressure _____
 Diameter of Screw shaft _____ Diam. of Tunnel shaft _____ Diam. of Crank shaft journals _____ Diam. of Crank pin _____ size of Crank webs _____
 Diameter of screw _____ Pitch of screw _____ No. of blades _____ state whether moveable _____ total surface _____
 of Feed pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 of Bilge pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 Where do they pump from _____

Lloyd's Register of British & Foreign Shipping.
PARTICULARS FOR RECORD OF MATERIAL OF BOILERS.

Port *Belfast* Date *18th Feb. 1888*
 No. of Report *3402*
 Ship's Name *"Oceana"* No. in Reg. Bk. *9th Sup.*
 Material of Shell Plates *Steel*
 Do. Stays { Longitudinal *Iron*
 Do. End Plates *Iron*
 Do. Furnaces *Steel* (a)
 Do. Combustion Chamber Plating *Steel*
 Do. Other Parts *Iron stays, tubes & Manhole doors of Iron.*

James Claxton
 ENGINEER-SURVEYOR TO LLOYD'S REGISTER.
 BELSH-0247
 Working Pressure *100 lbs* Tested by hydraulic pressure to _____
 Description of superheating apparatus or steam chest _____

each boiler be worked separately _____ Can the superheater be shut off and the boiler worked separately _____
 of square feet of fire grate surface in each boiler *42.5* Description of safety valves *See Log Burner's No. to each boiler Two*
 area of each valve *8.3* Are they fitted with easing gear *yes* No. of safety valves to superheater *1* area of each valve _____
 they fitted with easing gear _____ Smallest distance between boilers and bunkers or woodwork *18"* Diameter of boilers *12'-6"*
 length of boilers *10'-0"* description of riveting of shell long. seams *Butt straps 6/8 Riv. Circum. seams 6/8 lapped* Thickness of shell plates *25"*
 diameter of rivet holes *18"* whether punched or drilled *Drilled* pitch of rivets *4.5* Lap of plating *12" But straps*
 percentage of strength of longitudinal joint *75 plate* working pressure of shell by rules *103 lbs* size of manholes in shell *8" 12" x 16"*
 of compensating rings _____ *ell. Nils Patent* No. of Furnaces in each boiler *Three*
 inside diameter *35* length, top *7-0* bottom *9-6* thickness of plates *96* description of joint *Butt with 6/8 Riv. S.S. if rings are fitted one Steel*
 greatest length between rings *7'-3"* working pressure of furnace by the rules *100* combustion chamber plating, thickness, sides *2* back *2* top *2*
 of stays to ditto, sides *8 1/2 x 8 3/4* back *8 1/2 x 8 3/4* stays are fitted with nuts or riveted heads *nutted* working pressure of plating by rules *100 lbs*
 diameter of stays at smallest part *1 3/8* working pressure of ditto by rules *115* end plates in steam space, thickness *1"*
 of stays to ditto *17 1/4 x 17* how stays are secured *Two nuts and washers* working pressure by rules *113 lbs* diameter of stays at smallest part *2 5/8 x 3 1/8* working pressure by rules *135 lbs* Front plates at bottom, thickness *3/4* Back plates, thickness *3/4*
 greatest pitch of stays *13"* working pressure by rules *120 lbs* Diameter of tubes *35* pitch of tubes *4 1/4 x 4 1/4* thickness of tube _____
 plates, front *3/4* back *4/8* how stayed *Stay tubes 13 1/4 x 9 1/2* width of water spaces *6"* between boxes *705 Riv. like nuts.*
 diameter of Superheater or Steam chest _____ length _____ thickness of plates _____ description of longitudinal joint _____ diam. of rivet holes _____
 of rivets _____ working pressure of shell by rules _____ 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 _____ how stayed _____
 Superheater or steam chest; how connected to boiler _____

Harland & Wolff
 in 1888

James Claxton
 BELSH-0248