

REPORT ON MACHINERY.

No. 54026.

DEC 1907

Port of Newcastle

Received at London Office

FRI. 27 DEC 1907

No. in Survey held at NewcastleDate, first Survey July 11Last Survey Dec 21 1907

Reg. Book.

on the

S/S Oberon(Number of Visits 29)Tons Gross 5159Net 3173When built 1904Master MathewsBuilt at NewcastleBy whom built Armstrong Whitworth & Co. Ltd.Engines made at NewcastleBy whom made WallSEND Slipway & Eng. Co. Ltd.when made 1904Boilers made at NewcastleBy whom made WallSEND Slipway & Eng. Co. Ltd.when made 1904

Registered Horse Power

Owners C. Bowring & Co. Ltd.Port belonging to LiverpoolNom. Horse Power as per Section 28 432Is Refrigerating Machinery fitted for cargo purposes noIs Electric Light fitted yes

ENGINES, &c.—Description of Engines

In CPDNo. of Cylinders 3No. of Cranks 3Dia. of Cylinders 26.43.72 Length of Stroke 48 Revs. per minute 65 Dia. of Screw shaft 14 3/4 Material of screw shaft as per ruleIs 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 tightin 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 partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If twoliners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5' 1"Dia. of Tunnel shaft as per rule Dia. of Crank shaft journals as per rule Dia. of Crank pin 14 Size of Crank webs 28 1/2 x 9 1/2 Dia. of thrust shaft undercollars 14 Dia. of screw 18' 6" Pitch of Screw 17' 6" No. of Blades 4 State whether moveable f Total surface 108 fNo. of Feed pumps Keirs Diameter of ditto 7 x 9 1/2 Stroke 18 Can one be overhauled while the other is at work yesNo. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 24 Can one be overhauled while the other is at work yesNo. of Donkey Engines 2 Sizes of Pumps 7 x 4 1/2, 7 x 6 x 8 1/2, 6 No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room 4 of 3 1/2 In Holders, &c. 1 1/2 Compartment 2 of 2No. of Bilge Injections 4 sizes 7 Connected to condenser, or to circulating pump CPD Is a separate Donkey Suction fitted in Engine room & size yesAre 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 yesAre all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks bothAre 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 aboveAre 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 yesWhat pipes are carried through the bunkers none How are they protected yesAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yesDates of examination of completion of fitting of Sea Connections 1/11/04 of Stern Tube 1/11/04 Screw shaft and Propeller 1/11/04Is the Screw Shaft Tunnel watertight none Is it fitted with a watertight door yes worked from yesBOILERS, &c.—(Letter for record R) Manufacturers of Steel Spencer & Sons Ltd.Total Heating Surface of Boilers 7275 f Is Forced Draft fitted no No. and Description of Boilers 3, S. E.Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 29.8.04 No. of Certificate 7574Can each boiler be worked separately yes Area of fire grate in each boiler 642 f No. and Description of Safety Valves toeach boiler 2 Spring Area of each valve 8.29 Pressure to which they are adjusted 185 Are they fitted with easing gear yesSmallest distance between boilers or uptakes and bunkers or woodwork 2 feet Mean dia. of boilers 16' 0" Length 10' 9" Material of shell plates SThickness 1 1/2 Range of tensile strength 29.33 Are the shell plates welded or flanged flanged Descrip. of riveting: cir. seams as per rulelong. seams as per rule Diameter of rivet holes in long. seams 12 Pitch of rivets 10 Lap of plates or width of butt straps 21 3/4Per centages of strength of longitudinal joint rivets 85 Working pressure of shell by rules 209 Size of manhole in shell 16 x 12Size of compensating ring McNeil's No. and Description of Furnaces in each boiler 3 Deighton Material S Outside diameter 4' 1 3/4Length of plain part top Thickness of plates bottom Description of longitudinal joint weld No. of strengthening rings yesWorking pressure of furnace by the rules 202 Combustion chamber plates: Material S Thickness: Sides 7/8 Back 7/8 Top 5/8 Bottom 1 1/2Pitch of stays to ditto: Sides 8 x 4 1/2 Back 7 x 9 x 7 1/2 Top 7 1/2 x 7 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 219Material of stays S Diameter at smallest part 1' 6" Area supported by each stay 61.5 Working pressure by rules 195 End plates in steam space:Material S Thickness 1 1/2 Pitch of stays 16 1/2 x 15 1/2 How are stays secured a nut Working pressure by rules 212 Material of stays SDiameter at smallest part 27.9 Area supported by each stay 252.15 Working pressure by rules 188 Material of Front plates at bottom SThickness 1" Material of Lower back plate S Thickness 7/8 Greatest pitch of stays 14 Working pressure of plate by rules 188Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates S Thickness: Front 1 1/2 Back 3/4 Mean pitch of stays 9Pitch across wide water spaces 14 Working pressures by rules 183 Girders to Chamber tops: Material S Depth andthickness of girder at centre 8 1/4 x 12 Length as per rule 31 3/4 Distance apart 7 1/2 Number and pitch of stays in each 3 @ 4 1/2Working pressure by rules 183 Superheater or Steam chest; how connected to boiler yes Can the superheater be shut off and the boiler workedseparately yes Diameter 10 Length 10 Thickness of shell plates 10 Material S Description of longitudinal joint as per rule Diam. of rivetholes yes Pitch of rivets yes Working pressure of shell by rules yes Diameter of flue yes Material of flue plates yes Thickness yesIf stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness yes How stayed yesWorking pressure of end plates yes Area of safety valves to superheater yes Are they fitted with easing gear yesLloyd's Register
Foundation

Manufacturers of Steel

SPARE GEAR. State the articles supplied:— 1. set connecting rod bolts & nuts. 1 set of
Main bearing bolts & nuts. 1 set Coupling bolts & nuts. 1 set bridge pump
valves. 1 set valves for Wain's pumps. Propeller Shaft. & Propeller.
nut bolts & assorted iron.

FOR THE WALLSEND SLIDWAY & ENGINEERING CO., LIMITED.
Manufacturer.

Is the approved plan of main boiler forwarded herewith Yes

General Remarks (State quality of workmanship, opinions as to class, &c. Machinery and boilers built under Special Survey. Materials & Workmanship good. Engines and boilers examined under full steam & found satisfactory.)
In my opinion this vessel is now eligible for the record of F. L. M. C. 12/04. ✓

del. 27-12-07

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

FRI. 27 DEC 1907

+ L.M.B. 12.07
elec. light

MACHINERY CERTIFICATE
WRITTEN.

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