

REPORT ON MACHINERY.

Received at London Office

NEWCASTLE ON TYNE

Date of writing Report 19 When handed in at Local Office FEB 10 1911 Port of NEWCASTLE ON TYNE
 No. in Survey held at Newcastle Middleboro Date, First Survey 8th Aug 1910 Last Survey 4th March 1911
 Reg. Book 59 Supn the Machinery of the twin S.S. "Baron de Camela" (Number of Visits, 22) Tons { Gross 162.89
 Master J. Holloway Built at Middleboro By whom built Smith's Dock Co Ltd When built 1911
 Engines made at A. Shields By whom made A. Shields Engineering when made
 Boilers made at Newcastle By whom made Robert Stephenson & Co when made
 Registered Horse Power _____ Owners J. Alcock Sons & Co Port belonging to Para
 Nom. Horse Power as per Section 28 68 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

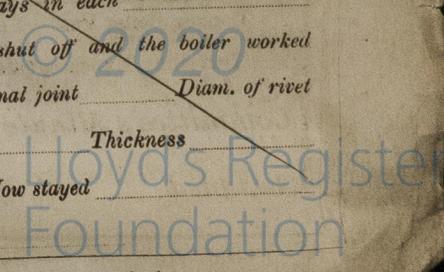
ENGINES, &c.—Description of Engines Compound (twin) No. of Cylinders 2 No. of Cranks 2
 Dia. of Cylinders 12" x 27" Length of Stroke 16" Revs. per minute _____ Dia. of Screw shaft 5.55 Material of screw shaft steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube 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 _____ Length of stern bush 23 5/8"
 Dia. of Tunnel shaft as per rule 4.26 Dia. of Crank shaft journals as per rule 5.1 Dia. of Crank pin 5 3/8 Size of Crank webs 8 3/4" x 3 1/2" Dia. of thrust shaft under
 collars 5 3/8 Dia. of screw 6-3 Pitch of Screw 8-0 No. of Blades 3 State whether moveable no Total surface 17 sq ft
 No. of Feed pumps 1 Diameter of ditto 2" Stroke 8 1/2" Can one be overhauled while the other is at work _____
 No. of Bilge pumps 1 Diameter of ditto 2" Stroke 8 1/2" Can one be overhauled while the other is at work _____
 No. of Donkey Engines 2 Sizes of Pumps 5" x 3" x 5" & 3" x 2" x 3" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2" dia. One 2" ejector In Holds, &c. Two 2" dia. in each hold. One
2" dia. in Tunnel well.
 No. of Bilge Injections 2 sizes 3" Connected to condenser, or to circulating pump _____ Is a separate Donkey Suction fitted in Engine room & size yes 2"
 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 _____
 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 13.1.11 of Stern Tubes 16.1.11 Screw shafts and Propellers 16.1.11
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door Yes on deck worked from main deck

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel See report on boiler attached.

Total Heating Surface of Boilers 1300 Is Forced Draft fitted _____ No. and Description of Boilers _____
 Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to
 each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
 Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
 long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Pitch of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____ End plates in steam space: _____
 Material of stays _____ Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of stays _____
 Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and
 thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Working pressure by rules _____ Superheater or Steam chest; how connected to boiler _____ Can the superheater be shut off and the boiler worked
 separately _____ 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

Im. 110-T.



VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety Valves _____

No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from 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 _____ Plates _____

Working pressure of shell by rules _____ 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 _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Radius of do. _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— *Two top + two bottom-end connecting rod bolts + nuts. Four main bearing bolts + nuts. Two sets of coupling bolts. One set of feed + bilge pump valves. Assorted bolts + nuts etc.*

The foregoing is a correct description,

Jno. Blakely Manufacturer. FOR THE SHIELDS ENGINEERING & DRY DOCK CO., LIMITED

Dates of Survey while building

During progress of work in shops	1910	Aug. 8, 23, 24, 29, 31, 1, 7, 22, Oct. 5, 10, Nov. 9, Dec. 6, 10, 15
During erection on board vessel	1911	Feb. 19, 22, 1911, Jan. 4, 13, 14, 16, 17, 19, 22, 25, 26, 30, 31, Feb. 1, 3, 7, 9, 15, 20, Mar. 4
Total No. of visits	13 +	Feb. 19

Is the approved plan of main boiler forwarded herewith _____

Dates of Examination of principal parts—Cylinders *22/9/10* Slides *22/9/10* Covers *22/9/10* Pistons *22/9/10* Rods *7/9/10*

Connecting rods *7/9/10* Crank shaft *24/8/10* Thrust shaft *24/8/10* Tunnel shafts *24/8/10* Screw shaft *24/8/10* Propeller *10/12/10*

Stern tube *10/12/10* Steam pipes tested *31. 1. 11* Engine and boiler seatings *14. 1. 11* Engines holding down bolts *26. 1. 11*

Completion of pumping arrangements *20. 2. 11* Boilers fixed *1. 2. 11* Engines tried under steam *20. 2. 11*

Main boiler safety valves adjusted *20. 2. 11* Thickness of adjusting washers *P 7/16 S 15/32*

Material of Crank shaft *Steel* Identification Mark on Do. *2570 W.D.H.* Material of Thrust shaft *Steel* Identification Mark on Do. *2570 W.D.H.*

Material of Tunnel shafts *Iron* Identification Marks on Do. *2570 W.D.H.* Material of Screw shafts *Iron* Identification Marks on Do. *2570 W.D.H.*

Material of Steam Pipes *Solid drawn copper* Test pressure *260 lbs*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Machinery of this vessel has been constructed under Special Survey the workmanship and materials used are both of good quality. The Engines and Boiler of this vessel have been fitted and seawared on board in accordance with the Rules. They are now in good working condition and in our opinion eligible to have the notation of + LMC 3. 11. in the Register Book.*

It is submitted that this vessel is eligible for THE RECORD + LMC 3. 11.

J.W.D. 16/3/11

R.H.C.

R.W. Cumber, Charles Cooper
Engineer Surveyors to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee . £ 1 : : When applied for, FEB 10 1911

Special Fee £ 10 : : When received, 20 13 1911

Donkey Boiler Fee . £ : : : : 21 3

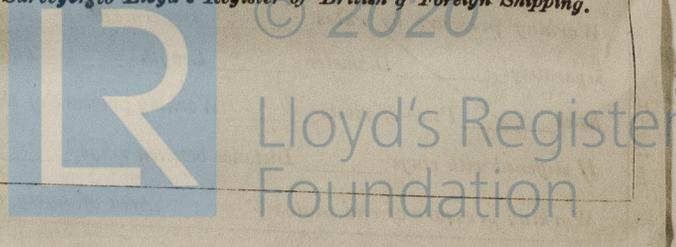
Travelling Expenses (if any) £ : : : : :

Committee's Minute **FRI 7 APR 1911**

Assigned *+ LMC 3. 11*

NEWCASTLE ON TYNE.

Certificate (if required) to be sent to the Registrar or below the space for Committee's Minute.



MACHINERY CERTIFICATE WRITTEN