Rpt. 4.

REPORT ON MACHINERY. No. 25637

TUES. 20 AUG 1907

Port of Glasgow Received at London Office 19

No. in Reg. Book. Survey held at Glasgow Date, first Survey 2nd March Last Survey 6th August 1907 (Number of Visits)

on the S.S. "La Plata" Tons Gross / Net

Master Built at Paisley By whom built J Fullerton & Co (No 199) When built 1907

Engines made at Glasgow By whom made Colin Houston (No 50) when made 1907

Boilers made at do By whom made Craig & Lawson (No 803) when made 1907

Registered Horse Power Owners Antonio Carbone Port belonging to Buenos Aires

Nom. Horse Power as per Section 28 59 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Compound No. of Cylinders 2 No. of Cranks 2

Dia. of Cylinders 15", 32" Length of Stroke 22" Revs. per minute 100 Dia. of Screw shaft as per rule 6.66 as fitted 6 3/4" Material of screw shaft iron

Is 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 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 29"

Dia. of Tunnel shaft as per rule 6.23 as fitted ✓ Dia. of Crank shaft journals as per rule 6.54 as fitted 6 5/8" Dia. of Crank pin 6 5/8" Size of Crank webs 4 1/4" Dia. of thrust shaft under collars 6 5/8" Dia. of screw 7.9" Pitch of Screw 9.6" No. of Blades 4 State whether moveable no Total surface 28.5 ☐ft

No. of Feed pumps 1 Diameter of ditto 2 1/4" Stroke 11" Can one be overhauled while the other is at work ✓

No. of Bilge pumps 1 Diameter of ditto 2 1/4" Stroke 11" Can one be overhauled while the other is at work ✓

No. of Donkey Engines 1 Sizes of Pumps ~~1" 3" 3"~~ 5"+3 1/2"+5" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room four - 2 1/2" In Holds, &c. two - 2 1/2" in hold ; one - 2 1/2" fore peak

No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size yes 2 1/2"

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 ✓

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 ✓ 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 12.7.07 of Stern Tube 12.7.07 Screw shaft and Propeller 12.7.07

Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel William Beardmore & Co

Total Heating Surface of Boilers 1148 ☐ft Is Forced Draft fitted no No. and Description of Boilers one single ended

Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 11.7.07 No. of Certificate 9020

Can each boiler be worked separately ✓ Area of fire grate in each boiler 36.6 ☐ft No. and Description of Safety Valves to each boiler double spring loaded Area of each valve 4.9 ☐" Pressure to which they are adjusted 135 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 11'.6" Length 10'.0" Material of shell plates steel

Thickness 3/4" Range of tensile strength 28/32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double long. seams treble Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5 3/4" ~~Lap of plates or~~ width of butt straps 14 1/4"

Per centages of strength of longitudinal joint rivets 95 plate 83.7 Working pressure of shell by rules 131 lbs Size of manhole in shell 16" x 12"

Size of compensating ring McNeil No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 3'.5 1/2"

Length of plain part top 6'.3" bottom 8'.7" Thickness of plates crown 11/64 bottom 11/64 Description of longitudinal joint welded No. of strengthening rings none

Working pressure of furnace by the rules 131 Combustion chamber plates: Material steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 31/32"

Pitch of stays to ditto: Sides 8 3/4" x 8 1/2" Back 8 1/4" x 9" Top 8 3/4" x 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 147

Material of stays steel ~~Diameter~~ area at smallest part 1.24 ☐" Area supported by each stay 74 ☐" Working pressure by rules 134 End plates in steam space:

Material steel Thickness 27/32" Pitch of stays 16 1/4" x 15" How are stays secured 0 nuts Working pressure by rules 130 Material of stays steel

~~Diameter~~ area at smallest part 3.49 ☐" Area supported by each stay 340 ☐" Working pressure by rules 139 Material of Front plates at bottom steel

Thickness 11/16" Material of Lower back plate steel Thickness 23/32" Greatest pitch of stays 13 1/2" x 9" Working pressure of plate by rules 136

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 11/16 & 1/2" 0. Back 11/16" Mean pitch of stays 11 1/4"

Pitch across wide water spaces 14" Working pressures by rules 160 lbs Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 3/4" x 2-3/4" Length as per rule 2'.4 3/4" Distance apart 8 3/4" Number and pitch of stays in each 2 @ 8 1/2"

Working pressure by rules 175 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

It a Report also sent on the Hull of the Ship?

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 Stayed by

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

SPARE GEAR. State the articles supplied :— 4 ho per tubes, 4 plain boiler tubes & 1 stay tube 6 condenser tubes, 12 condenser ferrules, 1 set of firebars, 1 set of air and circulating pump valves ✓

The foregoing is a correct description,

Manufacturer. Colin Houston & Co

Dates of Survey while building — During progress of work in shops — 1907 Mar 2 16 19 Apr 2 16 29 May 14 21 30 31 Jn 5 11 13 14 17 20 25 29 Jy 26 11 12 23 26

During erection on board vessel — August 2, 6

Total No. of visits 26

Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 8.4.07 Slides 31.5.07 Covers 31.5.07 Pistons 29.4.07 Rods 8.4.07

Connecting rods 8.4.07 Crank shaft 29.4.07 Thrust shaft 6.7.07 Tunnel shafts ✓ Screw shaft 6.7.07 Propeller 6.7.07

Stern tube 6.7.07 Steam pipes tested 26.7.07 Engine and boiler seatings 12.7.07 Engines holding down bolts 23.7.07

Completion of pumping arrangements 2.8.07 Boilers fixed 23.7.07 Engines tried under steam 6.8.07

Main boiler safety valves adjusted 6.8.07 Thickness of adjusting washers P 5/16" S 5/16"

Material of Crank shaft iron Identification Mark on Do. 50 Material of Thrust shaft iron Identification Mark on Do. 50

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts iron Identification Marks on Do. 50

Material of Steam Pipes Copper Test pressure 360 lbs per sq inch

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

The machinery has been built under special survey, the material and workmanship being good, and satisfactorily tried under steam

It is submitted that above vessel will be eligible for a record of + L.M.C. 8.07 in the Register Book

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.07.

JHC 22.8.07

HS 22.8.07

The amount of Entry Fee .. £ 1-:0-0

Special .. .. .. £ 8-17-0

Donkey Boiler Fee .. .. £ : :

Travelling Expenses (if any) £ : :

When applied for, 19 AUG 1907 19

When received, 28 8 07 19

29-8-07

A. S. Thomas H Gardner-Smith.

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

Committee's Minute Glasgow 19 AUG 1907

Assigned + LMC. 8.07

MACHINERY CERTIFICATE WRITTEN 20-8-07

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)