

9043
Received 16th December, 1885.

REPORT ON MACHINERY.

No. 9043

Received at London Office 18

No. in Survey held at Greenock & Port Glasgow Date, first Survey 1st May 1885 Last Survey 14th Decr. 1885
Pg. Book.

(Number of Visits 52) Tons 207.01

on the S.S. "Maule"

Tons 80.26

Master MacDougal Built at Port Glasgow By whom built J. Reid & Coy. When built 1885

Engines made at Greenock By whom made Kincaid & Coy. when made 1885

Motors made at Glasgow By whom made H. Wallace & Coy. when made 1885

Registered Horse Power 43 Owners Compania sud Americana de Vapores Port belonging to Valparaiso

Official Number

Engines, &c.—
Description of Engines Compound Inverted Direct Acting.

Diameter of Cylinders 16" & 32" Length of Stroke 20" No. of Rev. per minute 112 Point of Cut off, High Pressure 12 1/2" Low Pressure 12 1/2"

Diameter of Screw shaft 5 3/4" Diam. of Tunnel shaft 5 1/2" Diam. of Crank shaft journals 5 3/4" Diam. of Crank pin 5 3/4" size of Crank webs 7" x 3 1/2"

Diameter of screw 4 1/2" Pitch of screw 10" x 3" No. of blades four state whether moveable no total surface 19.20 feet

No. of Feed pumps one diameter of ditto 2 1/2" Stroke 10" Can one be overhauled while the other is at work —

No. of Bilge pumps one diameter of ditto 2 1/2" Stroke 10" Can one be overhauled while the other is at work —

Where do they pump from Engine room, Cargo Holds, well abaft tunnel, peak tanks & sea.

No. of Donkey Engines one Size of Pumps 13 1/2" x 6" Stroke Where do they pump from Sea, Hot well, Bilges & Peak tanks.

Are all the bilge suction pipes fitted with roses yes Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible yes

No. of bilge injections one and sizes 3" Are they connected to condenser, or to circulating pump circulating pump.

How are the pumps worked By levers.

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 accessible at all times yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock On Slip before vessel was launched.

Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Engine room Main.

BOILERS, &c.—

Number of Boilers _____ Description _____ Whether Steel or Iron _____

Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____

Description of superheating apparatus or steam chest _____

Can each boiler be worked separately _____ Can the superheater be shut off and the boiler worked separately _____

No. of square feet of fire grate surface in each boiler _____ Description of safety valves _____ No. to each boiler _____

Area of each valve _____ Are they fitted with easing gear _____ No. of safety valves to superheater _____ area of each valve _____

Are they fitted with easing gear _____ Smallest distance between boilers and bunkers or woodwork _____ Diameter of boilers _____

Length of boilers _____ description of riveting of shell long. seams _____ circum. seams _____ Thickness of shell plates _____

Diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ Lap of plating _____

Per centage of strength of longitudinal joint _____ working pressure of shell by rules _____ size of manholes in shell _____

Size of compensating rings _____ No. of Furnaces in each boiler _____

Outside diameter _____ length, top _____ bottom _____ thickness of plates _____ description of joint _____ if rings are fitted _____

Greatest length between rings _____ working pressure of furnace by the rules _____ combustion chamber plating, thickness, sides _____ back _____ top _____

Pitch of stays to ditto, sides _____ back _____ top _____ If stays are fitted with nuts or riveted heads _____ working pressure of plating by rules _____

rules _____ Diameter of stays at smallest part _____ working pressure of ditto by rules _____ end plates in steam space, thickness _____

Pitch of stays to ditto _____ how stays are secured _____ working pressure by rules _____ diameter of stays at smallest part _____

working pressure by rules _____ Front plates at bottom, thickness _____ Back plates, thickness _____

Greatest pitch of stays _____ working pressure by rules _____ Diameter of tubes _____ pitch of tubes _____ thickness of tube _____

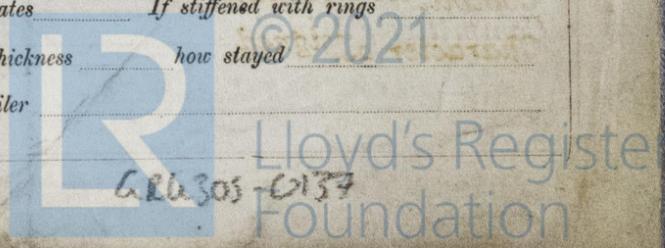
plates, front _____ back _____ how stayed _____ pitch of stays _____ width of water spaces _____

Diameter of Superheater or Steam chest _____ length _____ thickness of plates _____ description of longitudinal joint _____ diam. of rivet holes _____

Pitch 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 _____



DONKEY BOILER— Description

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 can 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 Connecting rod bolts & nuts top end, and 2 for bottom end. 2 Main bearing bolts. 1 set of Coupling bolts. 1 set of feed & bilge pump valves. 1 set of piston springs. a pair of crank pin brasses. a spare screw shaft. a spare propeller. 8 tubes for main boiler. 12 tubes for Condenser. 1 set of fire bars. a quantity of bolts, nuts, and iron assorted.*

The foregoing is a correct description,
Arnould & Co Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines have been specially surveyed during construction. Workmanship of good quality. Shafts examined when being rough turned and found satisfactory. Machinery & Boilers satisfactorily fitted on board and tested under full steam. They are now in good order and safe working condition and are in my opinion eligible to be noted in the Register Book.*)

L.M.C. 12.85.

It is submitted that this vessel is eligible to have the notification + L.M.C. 12.85 recorded

B.P.

17/12/85

The amount of Entry Fee £ 1 : 0 : 0 received by me, } *J.W.*

* Special £ 8 : 0 : 0

* Donkey Boiler Fee .. £ 2 : 2 : 0

Certificate (if required) £ *Grates* 12th Decr. 1885

To be sent as per margin.

(Travelling Expenses, if any, £ *Nil*)

A. G. Heron
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
 Greenock District.

Committee's Minute **FRIDAY 18 DEC 1885**

+ L.M.C.

