

REPORT ON MACHINERY.

Port of Genoa

MON 17 APR 1899

Received at London Office

No. in Survey held at Sestri Ponente Date, first Survey 2nd July 1898 Last Survey 12.4.1899
 Reg. Book. Steel Sparke Screw Steamer "Venus" (Number of Visits 15)
 Master Cremone Built at Sestri Ponente By whom built N. Odero & Co Tons {Gross 4051
 Engines made at Sestri Ponente By whom made N. Odero & Co When built 1899
 Boilers made at Sestri Ponente By whom made N. Odero & Co when made 1899
 Registered Horse Power 180 Owners Soc. Com. Ital. di Nav. Port belonging to Genoa
 Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted No Is Electric Light fitted No

ENGINES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. of stern bush
 Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under collars
 Dia. of screw Pitch of screw No. of blades State whether moveable Total surface
 No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room In Holds, &c.
 No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size
 Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible
 Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line
 Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate
 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
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight
 Is it fitted with a watertight door worked from

BOILERS &c.—

(Letter for record 8) Total Heating Surface of Boilers 7140 sq. ft. Is forced draft fitted No

No. and Description of Boiler 1. Orig. tubular - Porten Working Pressure 100 lb Tested by hydraulic pressure to 200 lb
 Date of test 15.10.98 In each boiler be worked separately Area of fire grate in each boiler 270 sq. ft. No. and Description of safety valves to each boiler 2, Spring loaded Area of each valve 5.740 sq. in. Pressure to which they are adjusted 102 lb Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 16" Mean dia. of boilers 9.2 1/2 Length 9.2 1/2 Material of shell plates Steel
 Thickness 11/20 Range of tensile strength 27-32 Are they welded or flanged Yes Descrip. of riveting: cir. seams out single long. seams butts double
 Diameter of rivet holes in long. seams 7/8 Pitch of rivets 3" 3/8 Lap of plates or width of butt straps 8 1/2
 Per centages of strength of longitudinal joint rivets 85 Working pressure of shell by rules 100 lb Size of manhole in shell None
 Size of compensating ring No. and Description of Furnaces in each boiler 2. Plain Material Steel Outside diameter 32"
 Length of plain part top 6' 6 3/4 Thickness of plates crown 10/20 bottom 10/20 Description of longitudinal joint lapped Single Plain No. of strengthening rings None
 Working pressure of furnace by the rules 100 lb Combustion chamber plates: Material Steel Thickness: Sides 10/20 Back 9/20 Top 9/20 Bottom 10/20
 Pitch of stays to ditto: Sides 7" 3/8 Back 7" 3/8 Top 9" 1/8 If stays are fitted with nuts or riveted heads First head Working pressure by rules 109 lb
 Material of stays Steel Diameter at smallest part 1" Area supported by each stay 50.4 sq. in. Working pressure by rules 121 lb End plates in steam space:
 Material Steel Thickness 3/4 Pitch of stays 14" 3/8 How are stays secured Double nuts Working pressure by rules 101 lb Material of stays Steel
 Diameter at smallest part 1 1/16 Area supported by each stay 200 sq. in. Working pressure by rules 102 lb Material of Front plates at bottom Steel
 Thickness 3/4 Material of Lower back plate Steel Thickness 12/20 Greatest pitch of stays 7" 1/8 Working pressure of plate by rules 101 lb
 Diameter of tubes 3" Pitch of tubes 4" Material of tube plates Steel Thickness: Front 15/20 Back 14/20 Mean pitch of stays 12"
 Pitch across wide water spaces 14" Working pressures by rules 136 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 14" Length as per rule 14" Distance apart 14" Number and pitch of Stays in each 14"
 Working pressure by rules 136 lb Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes Diameter 14" Length 14" Thickness of shell plates 10/20 Material Steel Description of longitudinal joint lapped Diam. of rivet holes 7/8 Pitch of rivets 3" 3/8 Working pressure of shell by rules 100 lb Diameter of flue 14" Material of flue plates Steel Thickness 10/20
 If stiffened with rings Yes Distance between rings 14" Working pressure by rules 100 lb End plates: Thickness 10/20 How stayed None
 Working pressure of end plates 100 lb Area of safety valves to superheater None Are they fitted with easing gear Yes

DONKEY BOILER— No. 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 Pressure to which they are adjusted 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 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 Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied: *Half Set of Fire Bars—Spring for Safety Valves—*

The foregoing is a correct description,

Manufacturer.

J. J. Thompson

Dates of Survey { During progress of work in shops - *Sept. 2. 7. 14. 23. Aug 9. 17. 28 Sept 19*
while board vessel - *Oct 15 - 1899 Jan 5. 11 Feb 21 March 18 - April 12 -*
building { Total No. of visits *15*

Is the approved plan of main boiler forwarded herewith

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

Not Retained for sister vessel

Constructed as per approved plan Dated 3. 12. 97
Workmanship Very Good

Submitted to an hydraulic pressure of 200 lb with good result
Safety Valves adjusted under steam to blow off at 10 lb pressure

The whole Material is Martin Harvey Steel produced by John Hancock and Son of Newcastle
Only tested and certified

Mr L. Masine has assisted me in this survey

The above Donkey Boiler is equal to that of her sister ship "Jupiter" launched from yard No 188

This Office

The amount of Entry Fee..	£	:	:	When applied for,
Special	2	:	2	15. 4. 99
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any) £	16	:	:	15. 4. 99

Committee's Minute

Assigned

TUES. 18 APR 1899

FRI. 12 MAY 1899

FRI. 2 JUN 1899

For & Special Office
Marini Marine Engineer

Lloyd's Register Foundation