

REPORT ON MACHINERY.

WED. 5 JAN 1898

Port of WEST HARTLEPOOL

Received at London Office 18

No. in Survey held at WEST HARTLEPOOL
Reg. Book.

Date, first Survey 10th Decr 1896 Last Survey 4th Jan'y 1898
(Number of Visits 177)

on the S.S. Victoria

Tons } Gross 6849
Net 4384
When built 1897/8

Master Jarvis Built at WEST HARTLEPOOL By whom built Jarvis & Co. Ltd.

Engines made at Hartlepool By whom made Geo. Richardson & Son Ltd. when made 1897

Boilers made at do By whom made do when made 1897

Registered Horse Power _____ Owners Robt. Jarvis & Co. Ltd. Port belonging to WEST HARTLEPOOL

Nom. Horse Power as per Section 28 963 Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines		No. of Cylinders	No. of Cranks
Diameter of Cylinders	Length of Stroke	Revolutions per minute	Diameter of Screw shaft as per rule as fitted
Diameter of Tunnel shaft as per rule as fitted	Diameter of Crank shaft journals	Diameter of Crank pin	Size of Crank webs
Diameter of screw	Pitch of screw	No. of blades	State whether moveable
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 (A.) Total Heating Surface of Boilers 121418 Is forced draft fitted Yes)

No. and Description of Boilers	<u>Two Single ended</u>	Working Pressure	<u>190</u>	Tested by hydraulic pressure to	<u>380</u>
Date of test	<u>23.8.97</u>	Can each boiler be worked separately	<u>Yes</u>	Area of fire grate in each boiler	<u>49.5</u>
each boiler	<u>Two Spring</u>	Area of each valve	<u>4.07</u>	Pressure to which they are adjusted	<u>195</u>
with easing gear	<u>Yes</u>	Smallest distance between boilers or uptakes and bunkers or woodwork	<u>Ship's side</u>	Mean diameter of boilers	<u>15.3"</u>
Length	<u>11.0</u>	Material of shell plates	<u>Steel</u>	Thickness	<u>1 1/2"</u>
Diameter of rivet holes in long. seams	<u>1 1/2"</u>	Pitch of rivets	<u>10"</u>	Lap of plates or width of butt straps	<u>2 1/4"</u>
Per centages of strength of longitudinal joint	<u>89.5</u>	Working pressure of shell by rules	<u>199.5</u>	Size of manhole in shell	<u>16 1/2"</u>
Size of compensating ring	<u>2.6 x 2.6 x 1 1/2</u>	No. and Description of Furnaces in each boiler	<u>3 Reissner</u>	Material	<u>Steel</u>
Length of plain part	<u>6.9</u>	Thickness of plates	<u>5"</u>	Description of longitudinal joint	<u>Bolted</u>
Working pressure of furnace by the rules	<u>210</u>	Combustion chamber plates: Material	<u>Steel</u>	Thickness: Sides	<u>3/32</u>
Pitch of stays to ditto: Sides	<u>8 1/2"</u>	Back	<u>8"</u>	Top	<u>8 5/8"</u>
Material of stays	<u>Iron</u>	Diameter at smallest part	<u>1 5/8"</u>	Area supported by each stay	<u>740</u>
Material	<u>Steel</u>	Thickness	<u>1 3/32</u>	Pitch of stays	<u>16 1/4 x 18</u>
Diameter at smallest part	<u>3 1/4"</u>	Area supported by each stay	<u>292</u>	Working pressure by rules	<u>240</u>
Thickness	<u>1 1/16</u>	Material of Lower back plate	<u>Steel</u>	Thickness	<u>1</u>
Diameter of tubes	<u>3 1/4"</u>	Pitch of tubes	<u>4 1/2"</u>	Material of tube plate	<u>Steel</u>
Pitch across wide water spaces	<u>14 1/4"</u>	Working pressures by rules	<u>195</u>	Girders to Chamber tops: Material	<u>Iron</u>
thickness of girder at centre	<u>10 1/2 x 2 1/4</u>	Length as per rule	<u>2.10</u>	Distance apart	<u>8 5/8"</u>
Working pressure by rules	<u>278</u>	Superheater or Steam chest; how connected to boiler	<u>none</u>	Can the superheater be shut off and the boiler worked separately	<u>Yes</u>
holes	Diameter	Length	Thickness of shell plates	Material	Description of longitudinal joint
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 casing gear			

If not, state whether, and when
Is a Report on the hull of the Ship?



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 _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main b. _____

enter the donkey boiler _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long. seams _____ Diameter 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 _____ Descri. _____

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:—

The foregoing is a correct description,
 For **THOMAS RICHARDSON & SONS, LIMITED** Manufacturer.

J. M. ... Director.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits

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

Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or behind the space for Committee's Minute.)

The amount of Entry Fee..	£	:	:	When applied for,
Special	£	:	:18.....
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:18.....

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

Committee's Minute **FRI. 14 JAN 1898**

Assigned