

REPORT ON MACHINERY.

Received at London Office 26/7/84

No. 5349
 No. in Survey held at Hull Date, first Survey 2nd Nov. 82 Last Survey 23 July 1883
 Reg. Book. on the Iron Steam Ship "Prince Alfred" (Number of Visits 25) 99.63
 Master Built at Hull By whom built Vulcan Iron Works, Hull When built 1883
 Engines made at Hull By whom made Vulcan Iron Works, Hull when made 1883
 Boilers made at Hull By whom made S. when made 1883
 Registered Horse Power 45 Owners Yorkshire Insurance Co. (Lm 7) Port belonging to Scarborough

ENGINES, &c.—

Description of Engines Vertical inverted compound surface condensing
 Diameter of Cylinders 24 17 1/2 x 34 Length of Stroke 24 No. of Rev. per minute Point of Cut off, High Pressure Low Pressure
 Diameter of Screw shaft 5 3/4 Diam. of Tunnel shaft 6 Diam. of Crank shaft journals 6 1/2 Diam. of Crank pin 6 1/2 size of Crank webs 7 1/4 x 4 7/8
 Diameter of screw 8.0 Pitch of screw 12.0 No. of blades 3 state whether moveable no total surface
 No. of Feed pumps one diameter of ditto 2 1/2 Stroke Can one be overhauled while the other is at work
 No. of Bilge pumps one diameter of ditto 3 1/4 Stroke Can one be overhauled while the other is at work
 Where do they pump from
 No. of Donkey Engines one Size of Pumps 2 1/4 x 6 Where do they pump from

Are all the bilge suction pipes fitted with roses Are the roses always accessible Are the sluices on Engine room bulkheads always accessible
 No. of bilge injections one and sizes Are they connected to condenser, or to circulating pump To circulating pump
 How are the pumps worked by rocking lever from piston rod crosshead
 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 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 Yes
 What pipes are carried through the bunkers How are they protected
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock 25th June 83
 Is the screw shaft tunnel watertight no tunnel and fitted with a sluice door worked from

BOILERS, &c.—

Number of Boilers one Description Circular multitubular Whether Steel or Iron iron
 Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 1st June 83
 Description of superheating apparatus or steam chest none fitted
 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 28 Description of safety valves Spring loaded No. to each boiler 2
 Area of each valve 7 sq. in. 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 3" Diameter of boilers 9' 9"
 Length of boilers 9' 0" description of riveting of shell long. seams Duplex lap circum. seams Duplex lap Thickness of shell plates 7/8"
 Diameter of rivet holes 1 1/2 x 1 3/8 whether punched or drilled drilled pitch of rivets 3.54 in Lap of plating 6 3/4 x 7"
 Percentage of strength of longitudinal joint 86 working pressure of shell by rules 87 1/2 size of manholes in shell 16' x 12'
 Size of compensating rings 4' x 3 1/4 No. of Furnaces in each boiler 2
 Outside diameter 34' length, top 6' 6" bottom 8' 3" thickness of plates 1/2" description of joint welded if rings are fitted
 Greatest length between rings 87 1/2 working pressure of furnace by the rules combustion chamber plating, thickness, sides 9/16" back 1/2" top 1/2"
 Pitch of stays to ditto, sides 9 3/4" back 8' 6 3/4" top 9" If stays are fitted with nuts or riveted heads working pressure of plating by
 rules 80 Diameter of stays at smallest part 1 1/16" working pressure of ditto by rules 85 1/4 end plates in steam space, thickness 1 1/16"
 Pitch of stays to ditto 1 1/2" to 1 3/8" how stays are secured with nuts working pressure by rules 80 lbs diameter of stays at
 smallest part (1 1/8") 1 1/8" working pressure by rules 80 lbs Front plates at bottom, thickness 5/8" Back plates, thickness 5/8"
 Greatest pitch of stays 11" working pressure by rules 98 1/2 Diameter of tubes 3" pitch of tubes 4 1/4" thickness of tube
 plates, front 5/8" back 5/8" how stayed Stay tubes pitch of stays 13 in min width of water spaces 1 1/4"
 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 _____ length _____ description of riveting _____
 Thickness of shell plates _____ diameter of rivet holes _____ 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
 Thickness of furnace crown plates _____ stayed by _____ working _____ hell by rules _____
 Working pressure of furnace by rules _____ diameter of uptake _____ thickness of plates _____ thickness of _____ tubes _____

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,

Manufacturer.

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

*Workmanship sufficiently good
 So far as seen*

*The machinery & Boiler of this vessel are in my opinion in safe working condition
 and on completion in compliance with the requirements of the rules, will be eligible
 for the notification **L.M.B. 6.83** in the Register Book.
 (See copies of correspondence forwarded)*

The amount of Entry Fee .. £ 1 : " : " received by me,

Special .. £ 8 : " : "

Donkey Boiler Fee .. £ " : " : "

Certificate (if required) .. £ " : " : " 29/6/1883

To be sent as per margin.

(Travelling Expenses, if any, £ ..)

Committee's Minute

TUESDAY 28 OCT 1884

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