

REPORT ON MACHINERY.

No. 2347

Received at London Office THURS 30 JUNE 1887

No. in Survey held at Penarth Date, first Survey July 23/85 Last Survey June 17 1887

Reg. Book. on the Iron S.S. "Albatros" (Number of Visits 341) Tons 201

Master G. S. Elliott Built at Penarth By whom built The Penarth Shipbuilding & Repairing Co. When built 1885

Engines made at Penarth By whom made The Penarth Shipbuilding & Repairing Co. when made 1885

Boilers made at Glanelly By whom made Mr. W. Neville (Glanelly) when made 1885

Registered Horse Power 55 Owners Mr. T. A. Walker Port belonging to London

ENGINES, &c.—

Description of Engines Compound, Inverted, direct acting, Surface Condensing

Diameter of Cylinders 20 1/2 Length of Stroke 24 No. of Rev. per minute 15 Point of Cut off, High Pressure 1/5 Low Pressure 1/5

Diameter of Screw shaft 6 1/4 Diam. of Tunnel shaft 6 1/4 Diam. of Crank shaft journals 6 1/4 Diam. of Crank pin 6 1/4 size of Crank webs 4 3/4 x 4 3/4

Diameter of screw 9 ft Pitch of screw 11 ft No. of blades 3 state whether moveable no total surface 21 sq ft

No. of Feed pumps one diameter of ditto 3 1/8 Stroke 12 Can one be overhauled while the other is at work ✓

No. of Bilge pumps one diameter of ditto 3 1/8 Stroke 12 Can one be overhauled while the other is at work ✓

Where do they pump from Each compartment

No. of Donkey Engines one Size of Pumps 3 1/2 dia cyl dia Stroke 7 Where do they pump from the sea, fore peak tank

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 1 1/2 dia Are they connected to condenser, or to circulating pump cut pump

How are the pumps worked by levers on the L. I. engine

Are 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

Are pipes carried through the bunkers none How are they protected ✓

Are pipes, cocks, valves, and pumps in connection with the machinery accessible at all times yes

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

Were stern tube, propeller, screw shaft, and all connections examined in dry dock previous to launching

Is screw shaft tunnel watertight none fitted and fitted with a sluice door worked from ✓

BOILERS, &c.—

No. of Boilers one Description Ordinary multitubular Whether Steel or Iron all iron

Working Pressure 80 lbs Tested by hydraulic pressure to 160 Date of test November 20th 1885

Description of superheating apparatus or steam chest horizontal dome

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

Square feet of fire grate surface in each boiler 33 sq ft Description of safety valves direct spring No. to each boiler two

Area of each valve 8.946 sq Are they fitted with easing gear yes No. of safety valves to superheater 1 area of each valve ✓

Are they fitted with easing gear ✓ Smallest distance between boilers and bunkers or woodwork 11" from bunkers Diameter of boilers 10' 6"

Description of riveting of shell long. seams dbl riv butt circum. seams dbl riv lap Thickness of shell plates 3/32

Size of rivet holes 1 1/16 whether punched or drilled drilled pitch of rivets 4 1/2 Lap of plating Straps 10"

Age of strength of longitudinal joint 46.4 working pressure of shell by rules 82 lbs size of manholes in shell 15" x 11"

Are compensating rings 5 1/4 x 23 No. of Furnaces in each boiler two

Diameter 34" length, top 6 ft bottom 8 ft 3" thickness of plates 1/2" description of joint S riv butt if rings are fitted 2 1/2 x 3 1/4

Length between rings 6 ft working pressure of furnace by the rules 100 lbs combustion chamber plating, thickness, sides 1/16" back 1/16" top 1/16"

Stays to ditto, sides 1/2 x 1/2 back 1/2 x 1/2 top radial stays are fitted with nuts or riveted heads nuts working pressure of plating by 40 lbs

Diameter of stays at smallest part 1 3/8 screw working pressure of ditto by rules 103 lbs end plates in steam space, thickness 5"

Stays to ditto 13 x 14 how stays are secured nuts & riv washers working pressure by rules 81 lbs diameter of stays at 2" x 2 3/8 ends (Iron)

Working pressure by rules 96 lbs Front plates at bottom, thickness 1/2" Back plates, thickness 1/2"

Pitch of stays 12 working pressure by rules ✓ Diameter of tubes 3 1/4 pitch of tubes 4 1/2 x 5 thickness of tube 5"

How stayed stay tubes pitch of stays 13 3/4 width of water spaces 5"

Diameter of Superheater or Steam chest 2' 6" length 6 ft thickness of plates 1/16" description of longitudinal joint dbl riv lap diam. of rivet holes 15/16"

Pitch of rivets 2 5/8 working pressure of shell by rules 144 lbs 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 9/16" how stayed one longitudinal

Stay 2 dia, ends dished Superheater or steam chest; how connected to boiler neck 15" x 3"



DONKEY BOILER— Description *None fitted*

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 _____

Working pressure of furnace by rules _____ diameter of uptake _____ thickness of plates _____ thickness of water _____

SPARE GEAR. State the articles supplied:— 1 propeller, 1 tail shaft, 1 slide valve spindle 1 air pump and rod with guards and valves complete one pair of crank pin brasses one pair of crosshead brasses, 2 Top end and 2 bottom end bolts and nuts 6 coupling bolts 2 main bearing bolts 1 H & L pressure packing ring piston springs, 2 feed & bilge pump valves

The foregoing is a correct description, 20 boiler tubes 20 condenser tubes a quantity of _____

For the Penarth Ship Building & Repairing Co. Ltd., Manufacturer.

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

The Machinery of this vessel has been built under special survey the materials and workmanship are good and the vessel is eligible in our opinion to be classed, and to have the notification **L.M.C. 6.87** recorded in the Registerbook.

It is submitted that this vessel is eligible to have the notification recorded
 J. L. Hindmarsh
 30/6/87

Cert

The amount of Entry Fee .. £ 1: - : - received by me,
 Special .. £ 8: 5: - per telegram
 Donkey Boiler Fee .. £ - : - : -
 Certificate (if required) .. £ : : : 7/7/1887
To be sent as per margin.
 (Travelling Expenses, if any, £ 1: 15: 6)

J. L. Hindmarsh & M. Lloyd
 Engineer Surveyors to Lloyd's Register of British & Foreign

Committee's Minute **FRIDAY 1 JULY 1887**

Don date of build 4/1/87

