

REPORT ON MACHINERY.

20455

No. 20455

No. in Survey held at Gateshead Date, first Survey 2nd April Last Survey 9th July 1887

Reg. Book. on the twin screw New Amsterdam (Number of Visits 8) Tons 103

Master J. Stadden Built at Newcastle By whom built C.S. Brown & Hunter When built 1887

Engines made at Gateshead By whom made Black Hawthorn Co when made 1887

Boilers made at " By whom made do when made 1887

Registered Horse Power 25 Owners Sproston, Son & Co Port belonging to London

ENGINES, &c.—

Description of Engines Compound inverted twin screw

Diameter of Cylinders 8 + 16 (2 each) Length of Stroke 14 No. of Rev. per minute 220 Point of Cut off, High Pressure .5 Low Pressure .5

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

Diameter of screw 4.2 Pitch of screw 4.6 No. of blades 3 state whether moveable no total surface 4.75 each

No. of Feed pumps 2 diameter of ditto 2 Stroke 6 Can one be overhauled while the other is at work no

No. of Bilge pumps 2 diameter of ditto 2 Stroke 6 Can one be overhauled while the other is at work no

Where do they pump from Starb. from bilge (centre) port from bilge after hold, fore hold & peak

No. of Donkey Engines one Size of Pumps 3" double acting Where do they pump from as port pump from

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 yes and sizes yes Are they connected to condenser, or to circulating pump yes

How are the pumps worked by cranks at end of shaft & rocking 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 yes How are they protected yes

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 new

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

BOILERS, &c.—

Number of Boilers one Description eye single welded Whether Steel or Iron Steel

Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test June 14th 1887 No. 2281

Description of superheating apparatus or steam chest none

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

No. of square feet of fire grate surface in each boiler 28 sq Description of safety valves sprung No. to each boiler two

Area of each valve 7.070 Are they fitted with easing gear yes No. of safety valves to superheater yes area of each valve yes

Are they fitted with easing gear yes Smallest distance between boilers and bunkers or woodwork 15 Diameter of boilers 8.6

Length of boilers 8.3 description of riveting of shell long. seams d butt tubular circum. seams lap 2" Thickness of shell plates 9/16

Diameter of rivet holes 13/16 whether punched or drilled drilled pitch of rivets 5 3/8 Lap of plating 12

Percentage of strength of longitudinal joint 84.8 working pressure of shell by rules 107 size of manholes in shell 12 x 16

Size of compensating rings 6 x 9/16 No. of Furnaces in each boiler Two

Outside diameter 2.11 length, top 5.0 bottom 5.0 thickness of plates 1/2 description of joint welded if rings are fitted 1/2

Greatest length between rings 5.0 working pressure of furnace by the rules 102 combustion chamber plating, thickness, sides 7/16 back 7/16 top 7/16

Pitch of stays to ditto, sides 7 7/8 back 7 7/8 top 7 7/8 If stays are fitted with nuts or riveted heads none working pressure of plating by rules 92 Diameter of stays at smallest part 1 working pressure of ditto by rules 108 end plates in steam space, thickness 13/16

Pitch of stays to ditto 14 how stays are secured draw working pressure by rules 120 diameter of stays at smallest part 1 3/4 working pressure by rules 110 Front plates at bottom, thickness 1/2 Back plates, thickness 1/2

Greatest pitch of stays 13 working pressure by rules 79 Diameter of tubes 3 1/2 pitch of tubes 4 1/2 thickness of tube plates, front 13/16 back 13/16 how stayed tubes pitch of stays 9 width of water spaces 6

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

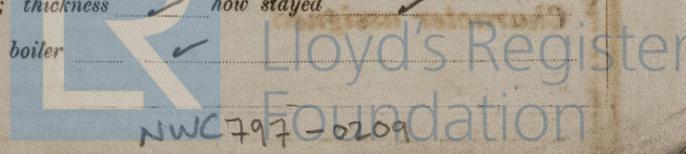
Pitch of rivets yes working pressure of shell by rules yes diameter of flue yes thickness of plates yes If stiffened with rings yes

Distance between rings yes working pressure by rules yes end plates of superheater, or steam chest; thickness yes how stayed yes

Superheater or steam chest; how connected to boiler yes

Report per 11/4/87 sent to Lm 11/4/87

Boiler Staying & Steel Tests not forwarded



NWC 797-0209

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:— 6 Coupling bolts, two main bearing bolts, 2 feed pump valves, 2 large pump valves, 2 connecting rod bolts, set of springs for glands, 1 safety valve spring, bolts nuts, Condenser tubes and usual engine room outfit.

The foregoing is a correct description,
 for Black Hawthorn the Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed under Special Survey, the materials and workmanship are sound and good and eligible, in my opinion to be classed L.M.C. 7. 87 in the Register Book.

* Please deliver Certificates to Owners in London

It is submitted that this vessel is eligible to have the notification + done 7. 87 recorded
 W.P.
 12/7/87

The amount of Entry Fee .. £ 1 : - : - received by me,
 Special £ 8 : - : -
 Donkey Boiler Fee £ - : - : -
 *Certificate (if required) .. £ gratis : - 11th July 1887

John H Waller
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute Tuesday, 12th July, 1887.
 + S.M.C.

