

REPORT ON MACHINERY.

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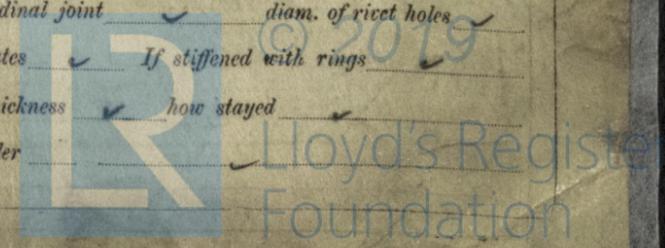
11 SEP. 91

Port of Bundee
 No. in Survey held at Bundee Date, first Survey Dec 12th 1890 Last Survey 9th Sept. 1891
 Reg. Book. S. S. Peregrine (Number of Visits 24)
 on the S. S. Peregrine Tons 1659
 Genl. Wills Built at Bundee By whom built W.B. Thompson & Co. Ltd. When built 1891
 Lines made at Bundee By whom made W.B. Thompson & Co. Ltd. when made 1891
 Meters made at Bundee By whom made W.B. Thompson & Co. Ltd. when made 1891
 Registered Horse Power 450 Owners General Steam Navigation Co. Port belonging to London

ENGINES, &c.—
 Description of Engines Triple Expansion - surface condensing
 Diameter of Cylinders 30 - 47 - 75 Length of Stroke 48 No. of Rev. per minute _____ Point of Cut off, High Pressure 29" Low Pressure 26"
 Diameter of Screw shaft 15 1/4 Diam. of Tunnel shaft 14 3/4 Diam. of Crank shaft journals 15 1/4 Diam. of Crank pin 15 1/4 size of Crank webs 28 x 10
 Diameter of screw 14' 6" Pitch of screw 21' 6" No. of blades 4 state whether moveable no total surface 760' 88"
 No. of Feed pumps 2 diameter of ditto 3 1/4 Stroke 36" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 diameter of ditto 3 3/4 Stroke 36" Can one be overhauled while the other is at work yes
 Where do they pump from All bilges & discharge overboard
 No. of Donkey Engines 3 Location Size of Pumps 7-4x8; 8-8x10; 5-3x4 Where do they pump from Ballast dky from all tanks & bilges sea-dist to condenser & overboard: 4" dky from all tanks, bilges & sea to boilers, overboard-deck & sanitary
 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 _____
 No. of bilge injections 1 and sizes 7 1/2" Are they connected to condenser, or to circulating pump circulating pump
 How are the pumps worked by levers from L-P Eng
 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
 How are the pipes carried through the bunkers Bilge, ballast & sanitary How are they protected wood casings
 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 never
 Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from main deck

BOILERS, &c.—
 Number of Boilers 2 Description Circular Multitubular Whether Steel or Iron Steel (a)
 Working Pressure 165 lbs Tested by hydraulic pressure to 330 lbs Date of test 15/4/91
 Description of superheating apparatus or steam chest ✓
 Can each boiler be worked separately yes Can the superheater be shut off and the boiler worked separately ✓
 No. of square feet of fire grate surface in each boiler 950' Description of safety valves spring No. to each boiler 2
 Area of each valve 12.5 Are they fitted with easing gear yes No. of safety valves to superheater ✓ area of each valve ✓
 Are they fitted with easing gear ✓ Smallest distance between boilers and bunkers or woodwork 9" air plate fitted Diameter of boilers 14' 3"
 Length of boilers 19' 0" description of riveting of shell long. seams double butts 2 1/2" circum. seams double riv lap Thickness of shell plates 1 3/16"
 Diameter of rivet holes 1 5/16" whether punched or drilled drilled pitch of rivets 8.42" Lap of plating 19"
 Percentage of strength of longitudinal joint 84.9 working pressure of shell by rules 169 size of manholes in shell 17x13"
DETAILS OF COMPENSATING RINGS
 Diameter 3' 4 1/16" length, top 7' 8" bottom 7' 11" thickness of plates 1 1/32" description of joint welded if rings are fitted Parvis
 Greatest length between rings 9' working pressure of furnace by the rules 175 combustion chamber plating, thickness, sides 9/16" back ✓ top 9/16"
 Pitch of stays to ditto, sides 7 1/2" back ✓ top 10" If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 168 Diameter of stays at smallest part 1.49 working pressure of ditto by rules 187 end plates in steam space, thickness 1 1/32"
 Pitch of stays to ditto 16" x 15" how stays are secured nuts - double working pressure by rules 187 diameter of stays at smallest part 2 13/16" working pressure by rules 174 Front plates at bottom, thickness 1 3/16" Back plates, thickness ✓
 Greatest pitch of stays 4" working pressure by rules ✓ Diameter of tubes 3 3/4" pitch of tubes 5" x 5" thickness of tube plates, front 7/8" back 1 3/16" how stayed scrued tubes pitch of stays 10" x 10" width of water spaces 11 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 ✓

DUN 118-0142



DONKEY BOILER— Description *Vertical cross tube*
 Made at *Dundee* by whom made *W B Thompson & Co Ltd* when made *1891* where fixed *Stokehold*
 Working pressure *80* tested by hydraulic pressure to *160* No. of Certificate *603* fire grate area *14.75* description of safety valves *Spring*
 No. of safety valves *2* area of each *3.9* if fitted with easing gear *yes* if steam from main boilers enter the donkey boiler *no*
 diameter of donkey boiler *5.3* length *12.6* description of riveting *double lap*
 Thickness of shell plates *1/2* diameter of rivet holes *7/8* whether punched or drilled *drilled* pitch of rivets *3/4* lap of plating *4/4*
 per centage of strength of joint *62%* thickness of crown plates *3/4* stayed by *8 solid stays*
 Diameter of furnace, top *3.11* bottom *4.4* length of furnace *7.1* thickness of plates *9/16* description of joint *single riv lap*
 Thickness of furnace crown plates *9/16* stayed by *8 solid stays* working pressure of shell by rules *107*
 Working pressure of furnace by rules *93* diameter of uptake *14* thickness of plates *5/8* thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:— *Propeller shaft; propeller; 1 pair main brasses; 1 pair top end & 2 brasses; 1 pair bottom end do; eccentric strap - Air pump bucket rod & gear 2 main bearing bolts & nuts - 2 top & 2 bottom end & 2 bolts - 1 set shaft coupling bolts, 1 set piston rings for each cylinder; 1 set each feed, bilge, ballast donkey & feed donkey valves & 1 set boiler check valves & seats - 2 safety*
 The foregoing is a correct description,
A. W. Anderson Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel has been built under special survey and in accordance with the enclosed approved drawings. The steel has been tested by the Society's surveyors at the steel works & the test certificates are annexed. The safety valves of main & donkey boilers were set at the working pressure of 165 lbs & 80 lbs respectively and engines seen running under steam with satisfactory result. Materials & workmanship are good.*

$$\frac{1}{2} \left\{ \frac{45^2 \times \sqrt{48}}{100} + \frac{6994}{15} \right\} = 428 \text{ NHP}$$

*The machinery is in good & safe working condition and the vessel is in our opinion eligible to be classed in the Register Book with the notification **LMC 9.91***

*It is submitted that this vessel is eligible to have + LMC 9.91 recorded.
 N.A.
 12-9-91*

[Large blue scribble]

The amount of Entry Fee .. £ 3 : - : - received by me,
 Special £ 41 : 8 : -
 Donkey Boiler Fee £ : : :
 Certificate (if required) .. £ : : : 9th Sept. 1891
 (To be sent as per margin.)

Harry Clarke & R. Heydell
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRI. 18 SEP 1891**
+ LMC 9.91

FRI. 25 SEP 1891

