

REPORT ON MACHINERY.

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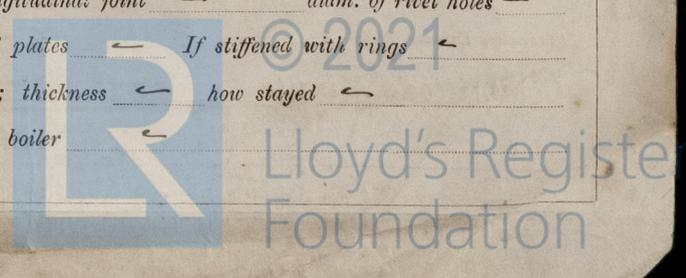
No. 26443 Port of Liverpool Received at London Office 9 JUN 92
 No. in Survey held at Liverpool Date, first Survey 4 Oct 91 Last Survey 28 Dec 91
 Reg. Book. S.S. "City of London" (Number of Visits 15)
 on the S.S. "City of London" Tons { Gross 357.00
 Master J. Berry Built at Liverpool By whom built Schlesinger & Davis Net 182.25
 Engines made at Liverpool By whom made Rochesters Marine Eng Co When built 1891
 Boilers made at do By whom made do when made 1891
 Registered Horse Power 50 Owners W. C. Thomas & Sons Port belonging to London

ENGINES, &c.—
 Description of Engines Triple expansion Surface Condensing No. of Cylinders 3
 Diam. of Cylinders 12 1/2, 20, 35 Length of Stroke 24 Rev. per minute 90 Point of Cut off, High Pressure 15 1/2 Low Pressure 13 1/2
 Diameter of Screw shaft 6 1/4 Diam. of Tunnel shaft 6 Diam. of Crank shaft journals 6 1/4 Diam. of Crank pin 6 1/4 size of Crank webs 3 1/2 x 4 1/2
 Diameter of screw 9.0 Pitch of screw 9.6 No. of blades 3 state whether moveable no total surface 29 8
 No. of Feed pumps 1 diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work -
 No. of Bilge pumps 1 diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work -
 Where do they pump from Hot well, Bilges, Holds, Tank, After well & Sea.
 No. of Donkey Engines 1 Size of Pumps 3 x 6 Where do they pump from After Tank, Holds, Engine Space, after well & Sea, also from Hot well.
 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 1 and sizes 1 1/2 Are they connected to condenser, or to circulating pump Circulating pump
 How are the pumps worked Levers over condenser
 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 none How are they protected -
 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 vessel
 Is the screw shaft tunnel watertight - and fitted with a sluice door yes worked from Upper platform

OILERS, &c.—
 No. of Boilers 1 Description Cylindrical Single ended Material Steel Letter (for record) -
 Working Pressure 160 Tested by hydraulic pressure to 320 Date of test 18.11.91 by cei 3764
 Description of superheating apparatus or steam chest none
 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 33 Description of safety valves Spring No. to each boiler 2
 Area of each valve 4.91 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 10" Diameter of boilers 10.9"
 Length of boilers 10.0" description of riveting of shell long. seams Lap Inad circum. seams Lap double Thickness of shell plates 1 1/2"
 Diameter of rivet holes 1 3/8" whether punched or drilled Drilled pitch of rivets 8 1/8" Lap of plating 12 1/2"
 Percentage of strength of longitudinal joint 84.1 working pressure of shell by rules 161 size of manholes in shell 16 x 12
 Size of compensating rings 2.6 x 2.3 No. of Furnaces in each boiler 2 Description of Furnaces Plain
 Outside diameter 3.0" length 6.6" thickness of plates 2 3/8" description of joint A.B. Chaps if rings are fitted 1/2"
 Greatest length between rings - working pressure of furnace by the rules 160 combustion chamber plating, thickness, sides 9/16 back 9/16 top 9/16
 Pitch of stays to ditto, sides 7 1/2" back 7 1/2" top 8 1/4" If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 160 Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 185 end plates in steam space, thickness 15/16
 Pitch of stays to ditto 16 x 16" how stays are secured Dr. Washers working pressure by rules 162 diameter of stays at smallest part 2 1/2" working pressure by rules 192 Front plates at bottom, thickness 3/4" Back plates, thickness 3/4"
 Greatest pitch of stays 11 working pressure by rules 160 Diameter of tubes 3 1/4" pitch of tubes 24 1/2 thickness of tube plates, front 3/4" back 3/4" how stayed Tubes pitch of stays 9" width of water spaces 5"
 Diameter of Superheater or Steam chest none 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 -

No. 26443 sent to London 8.1.92

26443-0043



DONKEY BOILER— Description *Vertical with three water tubes*
 Made at *Sheffield* by whom made *J. Sudron & Co* when made *27.11.91* where fixed *Stokehold*
 Working pressure *80 lb* tested by hydraulic pressure to *100 lb* No. of Certificate *358* fire grate area *14 sq* description of safety
 valves *Spring* No. of safety valves *1* area of each *4.04* if fitted with easing gear *yes* if steam from main boilers can
 enter the donkey boiler *no* diameter of donkey boiler *5.0"* length *11.0"* description of riveting *Lap double*
 Thickness of shell plates *1/32* diameter of rivet holes *13/16* whether punched or drilled *Punched* pitch of rivets *2 1/16* lap of plating *4 1/2"*
 per centage of strength of joint *70.4* thickness of crown plates *15/32* stayed by *5 Stays 1 1/2" effi diam*
 Diameter of furnace, top *3.10"* bottom *4.4"* length of furnace *4.10"* thickness of plates *1/2"* description of joint *Lap Single*
 Thickness of furnace crown plates *1/2"* stayed by *Same as shell crown* working pressure of shell by rule *79.5*
 Working pressure of furnace by rules *81.6* diameter of uptake *12"* thickness of plates *3/8"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *Propeller 2 main bearing bolts & nuts. 2 life*
bolts & nuts. 2 bottom end bolts & nuts 1 Set of shaft coupling bolts
1 Set of feed valves. 1 Set of bilge valves. Nuts bolts & turn a

The foregoing is a correct description,
 FOR AND ON BEHALF OF THE NORTH EASTERN
 MACHINE ENGINEERING COMPANY LIMITED. Manufacturer.

M. Adlington
General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery has been*
specially surveyed during construction the material and
workmanship good and renders the vessel eligible in my opinion
to have the Record + L No 612.91 in the Register Book of the
Society.

Heating Surface in (1) boiler = 1070 sq
N.A.P. as per Rules = 62 N.P.

+ LMC 12.91
CWS
11.1.92

MACHINERY CERTIFICATE
 WRITTEN

Certificate (if required) to be sent to *Newcastle office*

The amount of Entry Fee .. £ 1 : : : received by me,
 Special £ 9 : 6 : :
 Donkey Boiler Fee £ : : : :
1/11/92

(Travelling Expenses, if any, £)

Committee's Minute

JAN 12 1892

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

+ LMC 12.91

