

REPORT ON MACHINERY.

26773

No. *26443* Port of *Newcastle* Received at London Office *9 JUN 92*
 No. in Survey held at *Newcastle* 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* Net *182.25*
 Master *J. Berry* Built at *Newcastle* By whom built *Schlesinger & Davis* When built *1891*
 Engines made at *Newcastle* By whom made *Robert Dutton & Co* when made *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, 36* 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 7 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 *Cer 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 *32* 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 2nd* 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 3/4"* description of joint *R.B. Sharp* if rings are fitted *1 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 *1 1/16*
 Pitch of stays to ditto *16" x 16"* how stays are secured *By machine* working pressure by rules *162* diameter of stays at smallest part *3 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 *-*

26773-0043

DONKEY BOILER— Description *Vertical with three water tubes*
Made at *Stockport* by whom made *J. Hudson & Co* when made *27.11.91* where fixed *Stockport*
Working pressure *80 lb* tested by hydraulic pressure to *180 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 don't*
Thickness of shell plates *1 3/8"* diameter of rivet holes *1 3/8"* whether punched or drilled *Punched* pitch of rivets *2 1/8"* lap of plating *4 1/2"*
per centage of strength of joint *90.4* thickness of crown plates *1 5/8"* stayed by *5 Stays 1 1/2" eff 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 *81.6*
Working pressure of furnace by rules *81.6* diameter of uptake *17"* 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 slide valves. Nuts bolts & turn a

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

W. 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 & C 12.91 in the Register Book of the
Society.

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

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.