

REPORT ON MACHINERY.

BOX CASE 11151

THURS. 10 DEC 1891

No. 11151
 No. in Survey held at Glasgow
 Reg. Books Glasgow
 on the S. S. "Yopaz"
 Master H. Walsh Built at Bowling By whom built Scott & Co.
 Engines made at Glasgow By whom made Muir & Houston when made 1891
 Boilers made at Do. By whom made Do. when made 1891
 Registered Horse Power 75 Owners Wm Robertson Port belonging to Glasgow
 Date, first Survey 19th June Last Survey 28th Novem^r 1891
 Received at London Office 12 (Number of Visits)
 Tons { Gross 502
 Net 198
 When built 1891

ENGINES, &c.—

Description of Engines Inverted Direct Acting Triple Expansion No. of Cylinders Three
 Diam. of Cylinders 14-23-36 Length of Stroke 27 Rev. per minute 105 Point of Cut off, High Pressure 7/8 Low Pressure 1/2
 Diameter of Screw shaft 7 1/4 Diam. of Tunnel shaft 6 3/4 Diam. of Crank shaft journals 7 1/4 Diam. of Crank pin 7 1/4 size of Crank webs 5 1/4 x 10 1/2
 Diameter of screw 9-0 Pitch of screw 13-0 No. of blades Four state whether moveable Solid total surface 27 sq ft
 No. of Feed pumps One diameter of ditto 2 1/2 Stroke 13 1/2 Can one be overhauled while the other is at work
 No. of Bilge pumps One diameter of ditto 3 Stroke 13 1/2 Can one be overhauled while the other is at work
 Where do they pump from Engine Room & Hold
 No. of Donkey Engines One and one Size of Pumps 4 1/2" cyl 2 3/4" pump & 4" stroke Where do they pump from Engine room, hold, sea,
one Pubometer [Howell & Yank - Pubometer draws from all compartments -
 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 One and sizes 3" dia Are they connected to condenser, or to circulating pump Circulating
 How are the pumps worked By levers from crosshead of intermediate engine
 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 Pipes Forward How are they protected Wood
 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 Before launching
 Is the screw shaft tunnel watertight No Is it humed and fitted with a sluice door worked from

BOILERS, &c.—

No. of Boilers One Description Cylindrical Material Steel Letter (for record) S
 Working Pressure 160 lbs Tested by hydraulic pressure to 320 lbs Date of test Nov^r 14th 1891
 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 5 1/2 Description of safety valves Direct springs No. to each boiler Two
 Area of each valve 5.9 sq in Are they fitted with easing gear Yes No. of safety valves to superheater 1 area of each valve
 Are they fitted with easing gear Yes Smallest distance between boilers and bunkers or woodwork No side bunker Diameter of boilers 12-6
 Length of boilers 10-0 description of riveting of shell long. seams Butt three rows circum. seams Lap-double Thickness of shell plates 1 3/32
 Diameter of rivet holes 1 1/8 whether punched or drilled Drilled pitch of rivets 7 3/4 x 3 7/8 Lap of plating 17 x 7/8 butt chap.
 Percentage of strength of longitudinal joint 85.5 working pressure of shell by rules 162 lbs size of manholes in shell 11 x 16
 Size of compensating rings Doubling plate No. of Furnaces in each boiler Three Description of Furnaces Plain
 Outside diameter 39" length 6-6 thickness of plates 2 3/32 description of joint Butt if rings are fitted No
 Greatest length between rings working pressure of furnace by the rules 162 lbs combustion chamber plating, thickness, sides 9/16 back 9/16 top 9/16
 Pitch of stays to ditto, sides 7 3/4 x 7 3/4 back 7 3/4 x 7 3/4 top 7 3/4 x 7 1/2 If stays are fitted with nuts or riveted heads Nuts working pressure of plating by
 rules 162 lbs Diameter of stays at smallest part 1 3/8 x 1 1/2 working pressure of ditto by rules 200 lbs end plates in steam space, thickness 1"
 Pitch of stays to ditto 15 x 15 how stays are secured Nuts working pressure by rules 160 lbs diameter of stays at
 smallest part 2 1/2 in working pressure by rules 162 lbs Front plates at bottom, thickness 13/16 Back plates, thickness 13/16
 Greatest pitch of stays 12 x 7 3/4 working pressure by rules 160 lbs Diameter of tubes 3 1/4 pitch of tubes 4 1/2 x 4 1/2 thickness of tube
 plates, front 13/16 back 13/16 how stayed Tubes pitch of stays 13 1/2 x 9 width of water spaces 4 to 6
 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

DONKEY BOILER— Description *Vertical. Two cross tubes.*
 Made at *Glasgow* by whom made *Muir & Houston* when made *1891* where fixed *on deck*
 Working pressure *70 lbs.* tested by hydraulic pressure to *140 lbs.* No. of Certificate *3121* fire grate area *9 sq ft.* description of safety
 valves *Direct spring* No. of safety valves *one* area of each *4.9 sq ft.* if fitted with easing gear *yes* if steam from main boilers can
 enter the donkey boiler *No.* diameter of donkey boiler *4-3"* length *9-6"* overall description of riveting *Lap - double*
 Thickness of shell plates *3/8"* diameter of rivet holes *15/16"* whether punched or drilled *Rimmed* pitch of rivets *3 1/4"* lap of plating *4"*
 per centage of strength of joint *78* thickness of crown plates *9/16"* stayed by *Plate dished & three stays 1 1/2 dia*
 Diameter of furnace, top *3-0"* bottom *3-6"* length of furnace *4-6"* thickness of plates *7/16"* description of joint *Lap.*
 Thickness of furnace crown plates *7/16"* stayed by *Plate dished & three stays 1 1/2 dia* working pressure of shell by rules *120 lbs.*
 Working pressure of furnace by rules *77 lbs.* diameter of uptake *10"* thickness of plates *7/16"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *Top & bottom end bolts & nuts for connecting rods - 4 - main
 bearing bolts - One set of coupling bolts - Feed & bilge pump valves - One set of gas bars -
 Iron bolts & nuts assorted.*

The foregoing is a correct description,
Muir & Houston Manufacturer.

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

*These engines & boilers have been constructed
 under special survey - they are of good material & workmanship -
 they have been well fitted on board - satisfactorily tested under pressure
 and I am of opinion they are eligible to be classed **L.M.C.**
 the Register Book.*

Appended hereto are two reports on forgings

Certificate (if required) to be sent to

The amount of Entry Fee .. £ *1* .. received by me,
 Special .. £ *11* : *5* :
 Donkey Boiler Fee .. £ ..

2/11/1891

W. P. Robson
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

(Travelling Expenses, if any, £ ..)

Committee's Minute

TUES. 15 DEC 1891

+ L.M.C. 11.91



© 2020
 Lloyd's Register
 Foundation