

REPORT ON MACHINERY.

615

No. 6151 Port of Leith Received at London Office May 18 1890
 No. in Survey held at Wickheady Kinghorn Date, first Survey 11th March 1890 Last Survey 14th May 1890
 J. Book. (Number of Visits 48) 653
 on the Steel Screw Steamer "Buccaneer" Tons 959
 ter G. Avery Built at Kinghorn By whom built John Scott & Co. When built 1890
 ines made at Wickheady By whom made John Scott & Co. when made 1890
 ers made at Do By whom made Do when made 1890
 Registered Horse Power 180 Owners The "Buccaneer" Steam Ship Co. Ltd. Port belonging to London
Latham & Co. Glasgow
G. E. Bismarck

ENGINES, &c.—
 Description of Engines 2 bl. Expansion
 Diameter of Cylinders 21 1/2 Length of Stroke 36 No. of Rev. per minute 95 Point of Cut off, High Pressure 6 Low Pressure 6
 Diameter of Screw shaft 10 1/2 Diam. of Tunnel shaft 10 Diam. of Crank shaft journals 10 3/4 Diam. of Crank pin 10 3/4 size of Crank webs 15 x 7 1/2
 Diameter of screw 11 1/2 Pitch of screw 14 1/2 No. of blades 4 state whether moveable No total surface 44.5
 No. of Feed pumps two diameter of ditto 3 3/4 Stroke 21 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps two diameter of ditto 3 3/4 Stroke 21 Can one be overhauled while the other is at work Yes
 Where do they pump from Bilges
 No. of Donkey Engines 2 Size of Pumps 5 1/2 x 10 x 10 1/2 x 5 1/2 Duplex Where do they pump from Sea, hotwell, bilges
 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 one and sizes 4" Are they connected to condenser, or to circulating pump Circulating pump.
 Are the pumps worked Levers
 Are all connections to the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 Are they fit Yes by 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
 Are the pipes 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
 Were stern tube, propeller, screw shaft, and all connections examined in dry dock While building
 Is screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Top platforms.

BOILERS, &c.—
 Number of Boilers one Description Engl. multi-tubular riveted Whether Steel or Iron Steel (S)
 Working Pressure 156 lbs Tested by hydraulic pressure to 312 lbs Date of test 8/4/90
 Description of superheating apparatus or steam chest none
 Can 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 107.4 Description of safety valves Spring No. to each boiler two
 Area of each valve 14.19 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 12 Diameter of boilers 13-8 1/2
 Length of boiler 15-9 description of riveting of shell long. seams D.B.S., T.R. circum. seams L.D.R. Thickness of shell plates 13/16
 Diameter of holes 13/16 whether punched or drilled D pitch of rivets 7/8 Lap of plating 9"
 Length of longitudinal joint 84.9 working pressure of shell by rules 159 size of manholes in shell 15 1/2 x 11 1/2
 Are there any girders — No. of Furnaces in each boiler one
 Length of furnace 10" length, top 6-0 bottom 6-0 thickness of plates 7/32 description of joint welded if rings are fitted —
 Working pressure of furnace by the rules 162 combustion chamber plating, thickness, sides 9/16 back — top 5/8
 Push rods to pistons, sides 7/2 back — top 8/2 If stays are fitted with nuts or riveted heads nuts working pressure of plating by —
 Diameter of stays at smallest part 1 1/2 working pressure of ditto by rules 2285 end plates in steam space, thickness 3/4 5/8 x 1 1/2
 Pitch of stays 15 3/4 how stays are secured D.R. working pressure by rules 156 diameter of stays at —
 Small diameter 3 3/8 working pressure by rules 8600 Front plates at bottom, thickness 3/4 Back plates, thickness —
 Are the stays permanently working pressure by rules — Diameter of tubes 3 1/2 pitch of tubes 4 1/2 x 4 1/2 thickness of tube —
 Plating 3/4 back 3/4 how stayed stay tubes pitch of stays 9 x 8 1/2 width of water spaces 1 1/2
 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 —

Description of furnaces Furnaces Patent

17610-1-655447

DONKEY BOILER— Description *Ordinary vertical (steel) Four cross tubes*
Made at *Thirsk* by whom made *John Scott & Co.* when made *23/1/89* where fixed *stated*
Working pressure *90* tested by hydraulic pressure to *180* No. of Certificate *185* fire grate area *20* description of safety
valves *spring* No. of safety valves *one* area of each *8.3* if fitted with easing gear *yes* if steam from main boilers can
enter the donkey boiler *no* diameter of donkey boiler *6-0* length *11-0* description of riveting *F.D.R.*
Thickness of shell plates *1/2* diameter of rivet holes *13/16* whether punched or drilled *D* pitch of rivets *2 3/4* lap of plating *4 1/4*
percentage of strength of joint *64* thickness of crown plates *5/8* stayed by *8 palm stay 2" dia x 3 1/2 x 3 x 1/2 angle ring*
Diameter of furnace, top *4-11* bottom *5-11* length of furnace *5-0* thickness of plates *1/2* description of joint *L.S.R.*
Thickness of furnace crown plates *5/8* stayed by *disks* working pressure of shell by rules *96*
Working pressure of furnace by rules *90* diameter of uptake *18"* thickness of plates *1/2* thickness of water tubes *5/16*
SPARE GEAR. State the articles supplied:— *As required by Rules.*

The foregoing is a correct description,
John Scott & Co. Manufacturer.

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

*The machinery of this vessel has been built under special survey
workmanship & materials good.*

The approved tracing is sent herewith.

*The engines, boilers have been tried under steam & safety valves
adjusted, main stress at 180 lbs & donkey at 90 lbs per sq.*

*The machinery of this vessel is now in good condition & efficient
in my opinion, & the class marked* **L.M.C. 5-90.**

*It is submitted that this vessel is eligible
to have + L.M.C. 5-90 recorded. H.A.*

The amount of Entry Fee *£ 2* received by me,
Special *£ 27*
Donkey Boiler Fee *£*
Certificate (if required) *£*
To be sent as per margin.
(Travelling Expenses, if any, £ *4-0-0*)

Committee's Minute **TUES 20 MAY 1890**

+ L.M.C. 5/90

W. J. Darling 16.5.90
Engineer Superior to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register
Foundation