

REPORT ON MACHINERY.

8866

No. 8866 Port of Glasgow Received at London Office 10 NOV. 1888
 No. in Survey held at Glasgow Date, first Survey 14th February Last Survey 2^d Nov. 1888
 Reg. Book. on the S. S. Dunmore (Number of Visits 34) Tons 1281.44
 Master A. J. Campbell Built at Ayr By whom built W. Knight When built 1888
 Engines made at Glasgow By whom made Hutson & Corbett when made 1888
 Boilers made at " By whom made " when made 1888
 Registered Horse Power 117 Owners Hudson & W. Inosh Port belonging to Leith

ENGINES, &c.—

Description of Engines Triple Expansion (3 Cranks)
 Diameter of Cylinders 18" 30" 48" Length of Stroke 36" No. of Rev. per minute 80 Point of Cut off, High Pressure Near Low Pressure "
 Diameter of Screw shaft 9 1/4" Diam. of Tunnel shaft 8 3/4" Diam. of Crank shaft journals 9 1/4" Diam. of Crank pin 9 1/4" size of Crank webs 6 1/2" x 10 3/4"
 Diameter of screw 12 1/2" Pitch of screw 13.6" No. of blades 4 state whether moveable yes total surface 44 1/2"
 No. of Feed pumps 2 diameter of ditto 2 1/2" Stroke 20" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 diameter of ditto 3" Stroke 20" Can one be overhauled while the other is at work yes
 Where do they pump from All compartments
 No. of Donkey Engines Two Size of Pumps 8" x 10" x 6" ball. Where do they pump from Sea Bilges Hotwell
and Ballast Tanks 7" 8" x 4 1/2" feed.
 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 3 1/2" Are they connected to condenser, or to circulating pump To circulating
 How are the pumps worked by levers
 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 near to load line
 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 On slip before being launched
 Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Upper platform

BOILERS, &c.—

Number of Boilers One Description Round Horizontal Whether Steel or Iron Steel
 Working Pressure 160 lbs Tested by hydraulic pressure to 320 lbs Date of test 22^d September 1888
 Description of superheating apparatus or steam chest none
 Can each boiler be worked separately yes Can the superheater be shut off and the boiler worked separately yes
 No. of square feet of fire grate surface in each boiler 62 1/2 Description of safety valves Direct Spring No. to each boiler Two
 Area of each valve 4" 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 11" Diameter of boilers 10 1/2"
 Length of boilers 10 1/2" description of riveting of shell long. seams Double riveted circum. seams Double riveted Thickness of shell plates 1 5/16"
 Diameter of rivet holes 1 1/4" whether punched or drilled Drilled pitch of rivets 8 1/8" x 4 1/16" Lap of plating 16 3/8" x 1" Straps
 Percentage of strength of longitudinal joint 84 1/2% working pressure of shell by rules 161 lbs size of manholes in shell 14" x 12 1/2"
 Use of compensating rings Double piece fitted No. of Furnaces in each boiler Four
 Outside diameter 3.3 3/4" length, top 6.9" bottom 9.6" thickness of plates 8 1/16" description of joint Ribbed if rings are fitted yes
 Greatest length between rings " working pressure of furnace by the rules 160 lbs combustion chamber plating, thickness, sides 8 1/16" back 8 1/16" top 8 1/16"
 Pitch of stays to ditto, sides 4 1/2" x 4" back 4 1/2" x 4" top 4 1/2" x 4" If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 160 lbs
 diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 160 lbs end plates in steam space, thickness 1 5/16"
 Stays to ditto 14" x 14" how stays are secured By double nuts working pressure by rules 160 lbs diameter of stays at part 2 3/4" = 4.91" area
 working pressure by rules 184 lbs Front plates at bottom, thickness 1 1/16" Back plates, thickness 1 1/16"
 of stays 11" x 4" working pressure by rules 13 1/16" Diameter of tubes by tubes pitch of tubes 4 1/2" x 4 1/2" thickness of tube 14 1/16"
 how stayed by tubes pitch of stays 9 1/2" x 9 1/2" width of water spaces 6"
 Superheater or Steam chest yes length " thickness of plates " description of longitudinal joint " diam. of rivet holes "
 working pressure of shell by rules " diameter of flue " thickness of plates " If stiffened with rings yes
 rings yes working pressure by rules " end plates of superheater, or steam chest; thickness " how stayed "
 Superheater or steam chest; how connected to boiler "

Lloyd's Register Foundation

GLS186-0284

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DONKEY BOILER— Description *Vertical*

Made at *Gateshead* by whom made *Clarke Chapman & Parsons* when made *1888* where fixed *In Stockhold.*

Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs*. No. of Certificate *2612* fire grate area *12.5* description of safe

valves *ob. Spring* No. of safety valves *One* area of each *7* if fitted with easing gear *yes* if steam from main boilers

enter the donkey boiler *no* diameter of donkey boiler *5.6"* length *13 ft* description of riveting *Lap, double*

Thickness of shell plates *1 5/16"* diameter of rivet holes *1 3/16"* whether punched or drilled *Punched* pitch of rivets *2 3/4"* lap of plating *3 5/8"*

per centage of strength of joint *40* thickness of crown plates *9/16"* stayed by *4 Gussets*

Diameter of furnace, top *4 ft* bottom *4.10"* length of furnace *3.6"* thickness of plates *9/16"* description of joint *Lap single*

Thickness of furnace crown plates *9/16"* stayed by *Gussets* working pressure of shell by rules *91 lbs*

Working pressure of furnace by rules *80 lbs* diameter of uptake tubes thickness of plates *—* thickness of water tubes *Ordinary tubes*

SPARE GEAR. State the articles supplied:— *2 Connecting rod bolts for top & bottom end main bearing bolts, 1 set coupling bolts, 1 set of valves for main and donkey pumps, assortment of bolts nuts & springs*

The foregoing is a correct description,

J. J. Watson & Co. Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *The above mentioned*

engines and boilers are now completed onboard in a satisfactory manner and the machinery, which is of good workmanship and material, is in our opinion eligible to be noted in the Society's Register Book: L. M. & C. 11.88.

It is submitted that this vessel is eligible to have + SMC 11.88 recorded.

Ad
10.11.88

Boyle

The amount of Entry Fee .. £ *2* : - : - received by me,

Special *7/11* .. £ *14* : *11* : -

Donkey Boiler Fee .. £ - : - : -

Certificate (if required) .. £ - : - : - *7/11 1888*

To be sent as per margin (Travelling Expenses, if any, £ -)

Committee's Minute

+ dmb 11/88

TUES 13 NOV 1888

James Morrison
Engineer Surveyor to Lloyd's Register of British & Foreign

Clyde District
Lloyd's Register

Foundation