

REPORT ON MACHINERY.

41901

No. _____ (Received at London Office _____) 18
 No. in Survey held at London Date, first Survey 1 Sept Last Survey 23 Sept 1882
 Reg. Book. 578 on the S. S. Hutton Charters (Number of Visits 11) # 447
 Master Bell Built at Newcastle When built 1855
 Engines made at Newcastle Liverpool By whom made J. Jack 96 when made 1870
 Boilers made at for the S. S. Gloamin Worked in 1880 when made 1880
 Registered Horse Power 80 Owners E. T. Agius Port belonging to London

ENGINES, &c.—

Description of Engines New Boiler
 Diameter of Cylinders _____ Length of Stroke _____ No. of Rev. per minute _____ Point of Cut off, High Pressure _____ Low Pressure _____
 Diameter of Screw shaft _____ Diameter of Tunnel shaft _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ size of Crank webs _____
 Diameter of screw _____ Pitch of screw _____ No. of blades _____ state whether moveable _____ total surface _____
 No. of Feed pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 No. of Bilge pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 Where do they pump from _____
 No. of Donkey Engines _____ Size of Pumps _____ Where do they pump from _____
 Are all the bilge suction pipes fitted with roses _____ Are the roses always accessible _____ Are the sluices on Engine room bulkheads always accessible _____
 No. of bilge injections _____ and sizes _____ Are they connected to condenser, or to circulating pump _____
 How are the pumps worked _____
 Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the discharge pipes above or below the deep water line _____
 Are they each fitted with a discharge valve always accessible on the plating of the vessel _____ Are the blow off cocks fitted with a spigot and brass covering plate _____
 What pipes are carried through the bunkers _____ How are they protected _____
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times _____
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges _____
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____
 Is the screw shaft tunnel watertight _____ and fitted with a sluice door _____ worked from _____

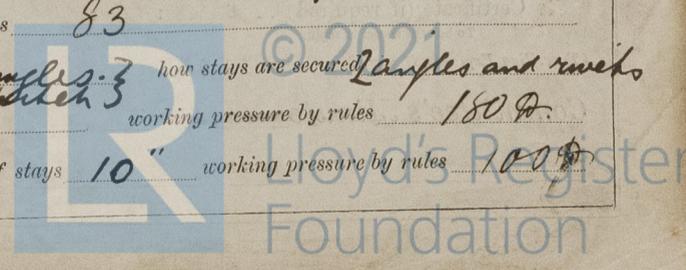
BOILERS, &c.—

Number of Boilers one Description Cylindrical return multibubular
 Working Pressure 60 lbs Tested by hydraulic pressure to 96 lbs Date of test 22 Sept 1882
 Description of superheating apparatus or steam chest vertical dome
 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 50 sq ft. Description of safety valves Spring
 No. to each boiler two area of each valve 12' 6" 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 2 ft to bunker 4" to Bulkhead of Hudd
 Diameter of boilers 144" Length of boilers 10' 0" description of riveting of shell long. seams lap treble rivet circum. seams lap double rivet
 Thickness of shell plates 13/16 diameter of rivet holes about 1/8 whether punched or drilled punched pitch of rivets 4"
 Lap of plating _____ per centage of strength of longitudinal joint 78% 90% working pressure of shell by rules 75 lbs.
 Size of manholes in shell 15" x 11" size of compensating rings angle iron
 No. of Furnaces in each boiler three outside diameter 36" length, top 7' 0" bottom 9' 6"
 Thickness of plates 1/2" description of joint lap. angle rivet if rings are fitted no greatest length between rings _____
 Working pressure of furnace by the rules 88 top. 65 bottom.
 Combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"
 Pitch of stays to ditto sides 9 x 8" back 9. x 8 top 9 x 8"
 If stays are fitted with nuts or riveted heads rivet heads. working pressure of plating by rules 79 lbs.
 Diameter of stays at smallest part 1 1/8" working pressure of ditto by rules 83
 End plates in steam space, thickness 1/2" pitch of stays to ditto 10 x 13 and angles 3 how stays are secured angles and rivets
 Working pressure by rules 64 lbs diameter of stays at smallest part 2 1/4" working pressure by rules 180 lbs.
 Front plates at bottom, thickness 5/8 Back plates, thickness 5/8 greatest pitch of stays 10" working pressure by rules 100 lbs.

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Form No. 8—21/6/82 3000.

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Diameter of tubes $3\frac{1}{4}$ pitch of tubes $4\frac{1}{2}$ thickness of tube plates, front $\frac{7}{8}$ back $\frac{7}{8}$
 How stayed *Stays* pitch of stays *—* width of water spaces *11"*
 Diameter of Superheater or Steam chest *from 32 to 16"* length *11' 6"* high *—*
 Thickness of plates $9/16$ description of longitudinal joint *lap* diameter of rivet holes *—* pitch of rivets *—*
 Working pressure of shell by rules *ample* 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 *ample* How stayed *dished*
 Superheater or steam chest; how connected to boiler *riveted*

DONKEY BOILER— Description
 Made at *—* By whom made *—* when made *—*
 Where fixed *—* working pressure *—* Tested by hydraulic pressure to *—* No. of Certificate *—*
 Fire grate area *—* Description of safety valves *—* No. of safety valves *—* area of each *—*
 If fitted with casing gear *—* If steam from main boilers can enter the donkey boiler *—*
 Diameter of donkey boiler *—* length *—* description of riveting *—*
 thickness of shell plates *—* diameter of rivet holes *—* whether punched or drilled *—*
 pitch of rivets *—* lap of plating *—* per centage of strength of joint *—*
 thickness of crown plates *—* stayed by *—*
 Diameter of furnace, top *—* bottom *—* length of furnace *—*
 thickness of plates *—* description of joint *—*
 thickness of furnace crown plates *—* stayed by *—*
 Working pressure of shell by rules *—* working pressure of furnace by rules *—*
 diameter of uptake *—* thickness of plates *—* thickness of water tubes *—*

The foregoing is a correct description,
 Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.) *The above boiler was said to have been constructed for the S. S. Gloamin (unclassified vessel) in 1880. The vessel was wrecked shortly afterwards. The boiler was examined and found to be in a good condition and the dimensions, ^{now found to be} as above. The sea-cocks which were under the platform have been shifted. One cock is still in an inaccessible position & will be removed on the vessel's return to a Dry Dock in about 6 months. The tail shaft was found to be smaller than the crankshaft and will be renewed in 6 months. The machinery was examined & found to be in good condition. It is submitted that the machinery of this vessel is eligible to have the notification L.M.C. 110-82 recorded in the Register Book provided the tail shaft be replaced by a thicker one and all coxles be made easily accessible within 6 months. See Secretary's letter to owners 26th Sept 1882.*

Submitted that this vessel is eligible to have the notification L.M.C. 9-82 recorded subject to the propeller shaft being renewed and the sea-cock shifted up to the top of the bulge within six months D.S. 2/11/82

The amount of Entry Fee .. £ 2 : : : received by me,
 Special £ 6 : 6 : -
 Certificate (if required) .. £ : 2 : 6 9.7 1883
 To be sent as per margin.
 (Travelling Expenses, if any, £)

440 F. J. H. NB 80 Jilt 28 82

C. J. Bromeyer
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute Tuesday, 7th November 1882

L.M.C. 110-82 NB 80 fitted 1882

Lloyd's Register Foundation