

REPORT ON MACHINERY. 4888/1

Received at London Office 18

No. Port of Date, first Survey *Nov. 19th/87* Last Survey *Dec. 17th 1888*
 No. in Survey held at *London* (Number of Visits *14*)
 Reg. Book. Tons
 on the *S. S. Countess of Gesseland*
 Master *Steward & Sathom* Built at *Millwall* By whom built *Steward & Sathom* When built *1888*
 Engines made at *E. Greenwich* By whom made *Appley Bros.* when made *1888*
 Boilers made at *do.* By whom made *do* when made *1888*
 Registered Horse Power *50* Owners Port belonging to

ENGINES, &c.—

Description of Engines *Turn Screw driving 4 Propellers. Inverted byldns.*
 Diameter of Cylinders *18" x 33"* Length of Stroke *24* No. of Rev. per minute *80* Point of Cut off, High Pressure *3/4* Low Pressure *3/4*
 Diameter of Screw shaft *6 1/4* Diam. of Tunnel shaft Diam. of Crank shaft journals *7"* Diam. of Crank pin *7"* size of Crank webs *8" x 5"*
 Diameter of screw *6 ft.* Pitch of screw *10 ft.* No. of blades *4* state whether moveable *no* total surface *18.4 sq. ft.*
 No. of Feed pumps *1* diameter of ditto *3* Stroke *9* Can one be overhauled while the other is at work
 No. of Bilge pumps *1* diameter of ditto *3* Stroke *9* Can one be overhauled while the other is at work
 Where do they pump from *Engine Room*
 No. of Donkey Engines *1* Size of Pumps *3 dia. 6 stroke* Where do they pump from *Stoke hold & Sea*
 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 and sizes Are they connected to condenser, or to circulating pump
 How are the pumps worked *Separate Engines*
 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 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 *Bilge discharge.* How are they protected *Wooden casing*
 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
 Is the screw shaft tunnel watertight *no tunnel.* and fitted with a sluice door worked from

BOILERS, &c.—

Number of Boilers *Two* Description *Multitubular* Whether Steel or Iron *Steel*
 Working Pressure *100 lbs.* Tested by hydraulic pressure to *200 lbs.* Date of test *Apr. 18th 1888*
 Description of superheating apparatus or steam chest *Steam dome.*
 Can each boiler be worked separately *yes.* Can the superheater be shut off and the boiler worked separately
 No. of square feet of fire grate surface in each boiler *32 sq. ft.* Description of safety valves *Direct spring* No. to each boiler *2*
 Area of each valve *7.07* 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 *8 ft. 3 in.*
 Length of boilers *14 ft.* description of riveting of shell long. seams *Double lap* circum. seams *Single lap.* Thickness of shell plates *11/16"*
 Diameter of rivet holes *1 1/16* whether punched or drilled pitch of rivets *3 3/4* Lap of plating *6 3/4*
 Per centage of strength of longitudinal joint *73%* working pressure of shell by rules *115 lbs.* size of manholes in shell *15" x 12"*
 Size of compensating rings *6" x 3/4"* No. of Furnaces in each boiler *2*
 Outside diameter *2.9* length, top *10.6* bottom thickness of plates *5/8"* description of joint *Milded* if rings are fitted *yes.*
 Greatest length between rings *5.3* working pressure of furnace by the rules *125 lbs.* combustion chamber plating, thickness, sides *1/2"* back *1/2"* top *1/2"*
 Pitch of stays to ditto, sides *8 1/2* back *8 1/2* top *8 1/2* If stays are fitted with nuts or riveted heads *nuts.* working pressure of plating by rules *106 lbs.* Diameter of stays at smallest part *1 1/4* working pressure of ditto by rules *106* end plates in steam space, thickness *11/16"*
 Pitch of stays to ditto *14* how stays are secured *nuts & washers.* working pressure by rules *100 lbs.* diameter of stays at smallest part *2"* working pressure by rules *144 lbs.* Front plates at bottom, thickness *11/16"* Back plates, thickness *11/16"*
 Greatest pitch of stays *10"* working pressure by rules *172 lbs.* Diameter of tubes *3 1/2* pitch of tubes *5* thickness of tube plates, front *11/16"* back *5/8"* how stayed *St. tubes.* pitch of stays *10"* width of water spaces *10"*
 Diameter of Superheater or Steam chest *2.3* length *2.6* thickness of plates *3/4"* description of longitudinal joint *double lap.* diam. of rivet holes *13/16"*
 Pitch of rivets *2"* 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 *Double ptd. 1 in. 3 3/8 pitch*

48881 LAM

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 easing 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 _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

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

The machinery has been built under Special Survey. Material & Workmanship good & eligible in my opinion to be marked in the Register Book with -I.M.C. 12.88

Safety valves set under steam to W.P. of 100 lbs & Engines work satisfactorily

It is submitted, that this vessel is eligible for L.M.C. 12-88.

N.A.
18-12-88

The amount of Entry Fee .. £ 15: : received by me, 21/12/88

Special £ : :
Donkey Boiler Fee £ : :
Certificate (if required) .. £ : : 26/2 1889

(Travelling Expenses, if any, £ _____)

Geo. O. Williamson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRIDAY 21 DEC 1888

+ LMB 12/88

