

REPORT ON MACHINERY.

9223

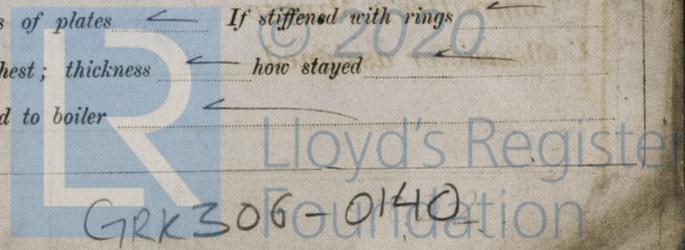
No. *9223* continued
 Received at London Office **NOV 22 1886**
 No. in Survey held at *Port Glasgow* Date, first Survey *17th May 86* Last Survey *18th Nov. 1886*
 Reg. Book. on the *S.S. "Australind"* (Number of Visits *48*) Tons *553.60*
 Master Built at *Port Glasgow* By whom built *Blackwood & Gordon* When built *1886*
 Engines made at *Port Glasgow* By whom made *do do* when made *1886*
 Boilers made at *do* By whom made *do do* when made *1886*
 Registered Horse Power *125* Owners *C Bethell & Co. & Trinder Anderson & Co.* Port belonging to *Fremantle*

ENGINES, &c.—

Description of Engines
 Diameter of Cylinders Length of Stroke No. of Rev. per minute Point of Cut off, High Pressure Low Pressure
 Diameter of Screw shaft Diam. of Tunnel shaft Diam. of Crank shaft journals Diam. 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.—

Donkey Boiler.
 Number of Boilers *One* Description *Round Horizontal Multitubular* Whether Steel or Iron *Steel*
 Working Pressure *4.5 lbs.* Tested by hydraulic pressure to *90 lbs per sq. in.* Date of test *8th October 1886.*
 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 *11.5* Description of safety valves *Direct spring* No. to each boiler *One*
 Area of each valve *7.06 sq. in.* 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 *16" to shade deck.* Diameter of boilers *5" 9"*
 Length of boiler *7' 3"* description of riveting of shell long. seams *Lap double rivet* circum. seams *single* Thickness of shell plates *3/8"*
 Diameter of rivet holes *13/16"* whether punched or drilled *Drilled* pitch of rivets *2 3/4"* Lap of plating *4"*
 Per centage of strength of longitudinal joint *50* working pressure of shell by rules *76 lbs* size of manholes in shell *16 x 12*
 Size of compensating rings *3 x 2 1/2 x 1/2* No. of Furnaces in each boiler *One*
 Outside diameter *30 3/4"* length, top *5' 0"* bottom *6' 9"* thickness of plates *3/8"* description of joint *Butt strap* if rings are fitted *no*
 Greatest length between rings working pressure of furnace by the rules *81 lbs* combustion chamber plating, thickness, sides *7/16"* back *7/16"* top *7/16"*
 Pitch of stays to ditto, sides *9 x 8 1/2"* back *8 3/4 x 8 1/2"* top *Radial* If stays are fitted with nuts or riveted heads *Riveted* working pressure of plating by rules *54 lbs* Diameter of stays at smallest part *1 1/4" (Iron)* working pressure of ditto by rules *102 lbs* end plates in steam space, thickness *15/32"*
 Pitch of stays to ditto *1 3/4 x 1 1/4"* how stays are secured *Double nuts* working pressure by rules *46.5 lbs* diameter of stays at smallest part *1 1/16" (Iron)* working pressure by rules *68 lbs* Front plates at bottom, thickness *15/32"* Back plates, thickness *15/32"*
 Greatest pitch of stays *8 3/4"* working pressure by rules *65 lbs* Diameter of tubes *2 1/2"* pitch of tubes *3 3/4 x 3 3/4"* thickness of tube plates, front *15/32"* back *1/2"* how stayed *Stay tubes* pitch of stays *7 1/2 x 7 1/2" & 11 1/4"* width of water spaces *3 to 5 inches*
 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



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 valves _____

No. of safety valves _____ area of each _____ if fitted with easing gear _____ if steam from main boilers _____

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 _____

percentage 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,

Wm Blackwood Manufacturer.
Wm Black

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

The amount of Entry Fee .. £ : : received by me, _____

Special .. £ : : _____

Donkey Boiler Fee .. £ : : _____

Certificate (if required) .. £ : : 18

To be sent as per margin.

(Travelling Expenses, if any, £ _____)

Committee's Minute

TUESDAY NOV 23 1886

A. C. Heron
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping, Glasgow

Greenock District

Lloyd's Register Foundation