

REPORT ON MACHINERY.

No. 6238

Received at London Office LONDON 17 SEPT 1883

No. in Survey held at Glasgow Date, first Survey Nov 13th 1882 Last Survey 1st Sept 1883
 Reg. Book. on the Screw Steamer Wreataea (Number of Visits 28) 434.82
 Tons 284.66
 Master John Gibb Built at Paisley By whom built H. M^c Intyre & Co When built 1883
 Engines made at Paisley By whom made Fleming & Ferguson when made 1883
 Boilers made at Do By whom made Do when made 1883
 Registered Horse Power 70 Owners Westport Coal Co^y Port belonging to Dunedin

ENGINES, &c.—

Description of Engines Inverted Direct Acting Compound Surface Condensing
 Diameter of Cylinders 20" x 40" Length of Stroke 30" No. of Rev. per minute 90 Point of Cut off, High Pressure 7/8" Low Pressure 7/8"
 Diameter of Screw shaft 7" Diam. of Tunnel shaft 6 3/4" Diam. of Crank shaft journals 7" Diam. of Crank pin 7 x 7" size of Crank webs 8 1/2" x 4 1/2"
 Diameter of screw 10'-0" Pitch of screw 13 ft No. of blades Four state whether moveable Yes total surface 220 sq ft
 No. of Feed pumps One diameter of ditto 3 1/2" Stroke 15" Can one be overhauled while the other is at work —
 No. of Bilge pumps One diameter of ditto 3 1/2" Stroke 15" Can one be overhauled while the other is at work —
 Where do they pump from Bilges + Holds
 No. of Donkey Engines One Size of Pumps 8 cyp: 4 pump x 10 stroke Where do they pump from Tanks, Sea, Holdwell
Bilges + Holds

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 Circulating
 How are the pumps worked By levers from L.P. engine
 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 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 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 Before launching
 Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Engine room level with deck

BOILERS, &c.—

Number of Boilers One Description Cylindrical Multitubular Whether Steel or Iron Iron Shell
 Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test June 19th 1883
 Description of ~~superheating apparatus~~ or steam chest Vertical Cylindrical
 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 54 Description of safety valves Direct springs No. to each boiler Two
 Area of each valve 15.9 sq ins 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 10 1/2" Diameter of boilers 12'-0"
 Length of boilers 9'-0" description of riveting of shell long. seams Butt double circum. seams Lap double Thickness of shell plates 13/16"
 Diameter of rivet holes 1 3/16" whether punched or drilled Pierced pitch of rivets 4 3/4" Lap of plating 10" Butt chaps
 Per centage of strength of longitudinal joint 75 working pressure of shell by rules 80 lbs size of manholes in shell 17 1/2" x 13 1/2"
 Size of compensating rings 4 1/2" x 3/4" double riveted No. of Furnaces in each boiler Three
 Outside diameter 3'-1" length, top 5'-9" bottom 8'-3" thickness of plates 7/16" description of joint Butt weld if rings are fitted yes
 Greatest length between rings 5'-9" working pressure of furnace by the rules 81 lbs combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"
 Pitch of stays to ditto, sides 8" back 8" top 10 x 7" If stays are fitted with nuts or riveted heads Both working pressure of plating by rules 80 lbs Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 105 lbs end plates in steam space, thickness 3/4"
 Pitch of stays to ditto 15" how stays are secured Nut working pressure by rules 89 lbs diameter of stays at smallest part 2" working pressure by rules 89 lbs Front plates at bottom, thickness 3/4" Back plates, thickness 3/4"
 Greatest pitch of stays 10" working pressure by rules 144 lbs Diameter of tubes 3 1/4" pitch of tubes 4 1/2" thickness of tube plates, front 3/4" back 5/8" how stayed Stay tubes pitch of stays 15 x 9" width of water spaces 5"
 Diameter of Superheater or Steam chest 2'-0" length 3'-0" thickness of plates 1/2" description of longitudinal joint Welded 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 1/2" how stayed Dished end
 Superheater or steam chest; how connected to boiler Riveted to shell

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DONKEY BOILER— Description *Vertical*
Made at *Gateshead* by whom made *Clark Chapman & Co* when made *1883* where fixed *In Stockhold*
Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *11614* fire grate area *16 sq ft* description of safety
valves *Direct spring* No. of safety valves *One* area of each *9.6 sq in* fitted with easing gear *Yes* if steam from main boilers can
enter the donkey boiler *No* diameter of donkey boiler *5'-6"* length *9'-0"* description of riveting *Lap - double*
Thickness of shell plates *1/2"* diameter of rivet holes *7/8"* whether punched or drilled *Punched* pitch of rivets *3 1/4"* lap of plating *4 1/4"*
per centage of strength of joint *73* thickness of crown plates *9/16"* stayed by *Five Wags* *1 1/2" dia*
Diameter of furnace, top *4'-2 1/4"* bottom *4'-8"* length of furnace *3'-10"* thickness of plates *9/16"* description of joint *Lap - single*
Thickness of furnace crown plates *9/16"* stayed by *Same as above* working pressure of shell by rules *85 lb*
Working pressure of furnace by rules *80 lb* diameter of uptake *14"* thickness of plates *3/8"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *Two connecting rod top & bottom end bolts*
Two main bearing bolts. One set of coupling bolts. One set feed & bilge
pump valves. Assorted iron bolts & nuts.

The foregoing is a correct description,
Henry Ferguson Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.)
These Engines & Boilers have been constructed
under special survey. They are of good material & workmanship,
they have been well fitted on board - satisfactorily tested
under steam & I am of opinion that they are eligible to be
classed "LLOYD'S M.C." 8-83 in the Register Book.

This submitted that this vessel
is eligible to have the notation
+ L.M.C. 9.83 recorded.

17/9/83

The amount of Entry Fee *£ 0:0* received by me,
Special *£ 10:10:0*
Donkey Boiler Fee *£ 0:0:0*
Certificate (if required) *£ 0:0:0* *14/9/1883*
To be sent as per margin.

(Travelling Expenses, if any, £)

Committee's Minute

TUESDAY 18 SEPT 1883

L.M.C.

Walter E. Robson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Glasgow

Lloyd's Register
Foundation