

REPORT ON MACHINERY.

No. 8891

Port of *Glasgow*

Received at London Office **JUES 27 NOV 1888**

No. in Survey held at *Glasgow*

Date, first Survey *5th July*

Last Survey *Nov 23rd 1888*

Reg. Book.

Number of Visits *19* Tons *913.86*

on the *S. S. Stanley*

Master *McElhinney* Built at *Glasgow*

By whom built *Fairfield Ship & Engineering Co* When built *1888*

Engines made at *Glasgow* By whom made

when made *1888*

Boilers made at " By whom made

when made *1888*

Registered Horse Power *300*

Owners *Canada Government (Marine Department)*

Port belonging to *Ottawa*

ENGINES, &c.—

Description of Engines *Triple Expansion (3 Cranks)*
 Diameter of Cylinders *24" 40" 63"* Length of Stroke *42"* No. of Rev. per minute — Point of Cut off, High Pressure *Variable* Low Pressure —
 Diameter of Screw shaft *14"* Diam. of Tunnel shaft *13"* Diam. of Crank shaft journals *13"* Diam. of Crank pin *13 1/2"* size of Crank webs *9 1/2" x 25 1/2" on*
 Diameter of screw *14" 6"* Pitch of screw *1 1/4"* No. of blades *4* state whether moveable *Yes* total surface *66 ft²*
 No. of Feed pumps *Two* diameter of ditto *3 3/4"* Stroke *21 1/2"* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *Two* diameter of ditto *3 3/4"* Stroke *21 1/2"* Can one be overhauled while the other is at work *Yes*
 Where do they pump from *All Compartments*
 No. of Donkey Engines *4* Size of Pumps *1 double 9" x 5" x 10"* Where do they pump from *Sea Triggs & Atwell*
1 Centrifugal for Ballast 6 1/2" pump 6" stroke
 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 *Two* and sizes *9" x 2 1/2"* Are they connected to condenser, or to circulating pump *To circulating the 9" + to condenser*
 How are the pumps worked *By Levers* *the 2 1/2"*
 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 loading*
 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 pipes to forehold* How are they protected *By wood 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 *On ship before launching*
 Is the screw shaft tunnel watertight *Yes* and fitted with a sluice door *Yes* worked from *Upper platform*

BOILERS, &c.—

Number of Boilers *Two* Description *Round Horizontal* Whether Steel or Iron *Steel*
 Working Pressure *160 lbs* Tested by hydraulic pressure to *3320 lbs* Date of test *4th Oct. 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 —
 No. of square feet of fire grate surface in each boiler *98 ft²* Description of safety valves *Direct Spring* No. to each boiler *Three*
 Area of each valve *15.9"* Are they fitted with casing gear *Yes* No. of safety valves to superheater — area of each valve —
 Are they fitted with casing gear — Smallest distance between boilers and bunkers or woodwork — Diameter of boilers *12" 3"*
 Length of boilers *16" 4 1/2"* description of riveting of shell long. seams *Double riveted* circum. seams *Double riveted* Thickness of shell plates *1 1/16"*
 Diameter of rivet holes *1 3/16"* whether punched or drilled *Drilled* pitch of rivets *8 1/2" 4 1/4" x 2 1/4"* Lap of plating *1 1/2" x 1 1/16" Straps*
 Per centage of strength of longitudinal joint *86%* working pressure of shell by rules *160 lbs* size of manholes in shell *16" 12"*
 Size of compensating rings *By forged rings* No. of Furnaces in each boiler *Four*
 Outside diameter *3' 7"* length, top *6" 10 1/2"* bottom — thickness of plates *10 1/16"* description of joint *Ribbed* if rings are fitted —
 Greatest length between rings — working pressure of furnace by the rules *140 lbs* combustion chamber plating, thickness, sides *8 1/16"* back — top *8 1/16"*
 Pitch of stays to ditto, sides *6 7/8" x 6 7/8"* back — top *6 7/8" x 6 7/8"* 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" = 99" area* working pressure of ditto by rules *165 lbs* end plates in steam space, thickness *3 1/2"*
 Pitch of stays to ditto *14" x 13 1/2"* how stays are secured *By double nuts* working pressure by rules *160 lbs* diameter of stays at smallest part *3" 4"* area — working pressure by rules *140 lbs* Front plates at bottom, thickness *12 1/16"* Back plates, thickness —
 Greatest pitch of stays — working pressure by rules — Diameter of tubes *3 1/4"* pitch of tubes *4 3/8" x 4 3/8"* thickness of tube plates, front *1 3/16"* back *1 4/16"* how stayed *By tubes* pitch of stays *13 3/8" x 8 3/4"* width of water spaces *6"*
 Diameter of Superheater or Steam chest *None* 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 —

Lloyd's Register Foundation

GH156-0323

8891 g/s

DONKEY BOILER Description *(Cochran's) Round vertical Horizontal*
 Made at *Birkenhead* by whom made *Cochrane & Co* when made *1888* where fixed *In Stockhold*
 Working pressure *160 lbs* tested by hydraulic pressure to *320 lbs* No. of Certificate *422* fire grate area *8 1/2 ft* description of safety
 valves *Direct Spring* No. of safety valves *Two* area of each *3.14* if fitted with easing gear *Yes* if steam from main boilers can
 enter the donkey boiler *No* diameter of donkey boiler *5'-0"* length *8'-6"* description of riveting *Lap joint*
 Thickness of shell plates *19/32 & 21/32* diameter of rivet holes *1"* whether punched or drilled *Drill* pitch of rivets *3 1/2"* lap of plating *6 1/4"*
 per centage of strength of joint *40%* thickness of crown plates *19/32* stayed by *Hemispherical*
 Diameter of furnace, top *2'-8"* bottom *1'-8"* length of furnace *3'-8"* thickness of plates *19/32* description of joint *Double butt*
 Thickness of ~~plates~~ *Comb Chamber* *9/16* stayed by *1/4" stays 4" x 4" pitch* working pressure of shell by rules *160*
 Working pressure of furnace by rules *281 lbs* diameter of uptake *1'-0"* thickness of plates *1/4"* thickness of water tubes *1/2"*

SPARE GEAR. State the articles supplied:— *2 Pulley blades 3/4 Crank Shaft, 1 pair Connecting
 brasses 2 Connecting rod bolts, 2 crosshead bolts & nuts, 1 Air pump bucket with rod
 Complete also Circulating pump bucket & rod with 1 set of valves (Metallic in
 India rubber) 2 main bearing bolts, 12 Coupling bolts, assortment bolts
 nuts, tubes, Springs and other gear*

THE TAYLOR & SON, LTD. correct description,
 AND ENGINEERING CO. LIMITED Manufacturer.
 R. Barnwell DIRECTOR.

General Remarks (State quality of workmanship, opinions as to class, &c.) *These Engines and Boilers
 are of good workmanship and materials and are now in good
 order and safe working condition and eligible in my op.
 to be noted in the Register L.M.C 11/88*

Large blue circular stamp or mark, possibly a signature or official seal.

*Submitted that this
 need to be checked in
 L.M.C 11.88
 27.11.88*

The amount of Entry Fee .. £ *3* : - : received by me,
 Special .. £ *35* : - :
 Donkey Boiler Fee .. £ : : :
 Certificate (if required) .. £ : : : *26/11/1888*
 (Travelling Expenses, if any, £)

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

Committee's Minute

TUES 27 NOV 1888

+dmb 11/88

Clyde District
 Lloyd's Register
 Foundation