

REPORT ON MACHINERY.

No. 8891

Port of

Glasgow

No. in Survey held at
Reg. Book.

Glasgow

Date, first Survey

5th July

Received at London Office

TUES 27 NOV 1888

Last Survey

Nov 23 1888

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" 20" 13" 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" 1 min 9" x 7" x 18" Where do they pump from Sea Brigs & 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 freehold 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 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 — 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" + 2 1/4" Lap of plating 14 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 and plates in steam space, thickness 3/32"
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 13 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 5/8" 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 —

8891 gls

DONKEY BOILER Description *(Cochranes) 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* 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 *1 1/2" & 3/4"* 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 *1 1/2"* stayed by *Hemispherical*
Diameter of furnace, top *2'-8"* bottom *1'-0"* length of furnace *3'-8"* thickness of plates *1 1/2"* description of joint *Double butt*
Thickness of *Comb. Chamber* crown plates *3/16"* stayed by *1 1/4" stays 4" x 4" pitch* working pressure of shell by rules *16 1/2*
Working pressure of furnace by rules *281 lbs* diameter of uptake *1'-0"* thickness of plates *1"* thickness of water tubes *1"*

SPARE GEAR. State the articles supplied:— *2 Propeller blades 3' 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 (Elastic in
India rubber) 2 main bearing bolts, 12 Coupling bolts, assortment bolts
& nuts, tubes, Springs and other gear*
THE *THORPE & CO* 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*

Q. 2

*Submitted that this
vessel is eligible to
have L.M.C 11.88
(M)
27.11.88*

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

Committee's Minute

TUES 27 NOV 1888

+dmb 11/88

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

Clyde District

Lloyd's Register
Foundation