

REPORT ON MACHINERY.

6159

No. 6159

No. in Survey held at Glasgow

Date, first Survey 18.9.82 Last Survey 21st June 1883

(Received at London Office 25th JUNE 1883)

Reg. Book.

on the S. S. Sargasso

(Number of Visits) 1490.10

Master George Morris

Built at Glasgow

When built 1883

Engines made at Glasgow

By whom made J. & G. Thomson when made 1883

Boilers made at do

By whom made do when made do

Registered Horse Power 120

Owners Scrutton Sons & Co.

Port belonging to London

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting.
 Diameter of Cylinders 30" x 56" Length of Stroke 36" No. of Rev. per minute 72 Point of Cut off, High Pressure 25" Low Pressure 20"
 Diameter of Screw shaft 10 1/4" Diameter of Tunnel shaft 9 3/4" Diameter of Crank shaft journals 10 1/2" Diameter of Crank pin 10 1/2" size of Crank webs 6 1/2" x 12"
 Diameter of screw 12'-2" Pitch of screw 16'-3" No. of blades 4 state whether moveable yes total surface 521.09 sq. ft.
 No. of Feed pumps 2 diameter of ditto 4" Stroke 18" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 diameter of ditto 4" Stroke 18" Can one be overhauled while the other is at work yes
 Where do they pump from All Compartments
 No. of Donkey Engines One Size of Pumps 4" x 9" at. Where do they pump from All Compartments

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 Air pump.
 How are the pumps worked by Levers
 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 below
 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 suction to fore hold. 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 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 One Description Double Ended Multitubular Cylindrical
 Working Pressure 90 lbs. Tested by hydraulic pressure to 180 lbs. Date of test 2nd May 1883
 Description of superheating apparatus or steam chest Horizontal Chest
 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 95.14 sq. ft. Description of safety valves Direct Spring
 No. to each boiler two area of each valve 23.95 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 15"
 Diameter of boilers 13'-0" Length of boilers 15'-0" Description of riveting of shell long. seams Double butt strap seams double Lap
 Thickness of shell plates 3/8" diameter of rivet holes 5/8" whether punched or drilled drilled pitch of rivets 4 1/2"
 Lap of plating 5" per centage of strength of longitudinal joint 77 working pressure of shell by rules 100 lbs.
 Size of manholes in shell 16" x 12" size of compensating rings Angle Iron 4 1/2" x 4 1/2" x 5/8"
 No. of Furnaces in each boiler Six outside diameter 3'-9" length, top 5'-6" bottom (7'-4)" through furnace
 Thickness of plates 3/8" description of joint double butt if rings are fitted Tiron greatest length between rings 5'-0"
 Working pressure of furnace by the rules 100 lbs.
 Combustion chamber plating, thickness, sides 1/2" back — top 1/2"
 Pitch of stays to ditto, sides 8" x 8 1/2" back — top Guides.
 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 104 lbs.
 End plates in steam space, thickness 27/32" pitch of stays to ditto 17" x 17" how stays are secured nut washers double nuts
 Working pressure by rules 90 lbs. diameter of stays at smallest part 2 3/8" working pressure by rules 90 lbs.
 Front plates at bottom, thickness 5/8" Back plates, thickness — greatest pitch of stays — working pressure by rules —

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Diameter of tubes 3" pitch of tubes 4 1/2 x 4 1/2 thickness of tube plates, front 5/8" back 5/8"
 How stayed stay tubes pitch of stays 13 1/2 x 9" width of water spaces 6"
 Diameter of Superheater or Steam chest 3'-0" length 10'-0"
 Thickness of plates 1/2" description of longitudinal joint Lap diameter of rivet holes 7/8" pitch of rivets 2 1/2"
 Working pressure of shell by rules 203 lb 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 5/8" How stayed three steel stays 2 1/2" diam.
 Superheater or steam chest; how connected to boiler with throat.

DONKEY BOILER

Description Cylindrical Vertical.
 Made at Glasgow By whom made J. & G. Thomson when made 1883.
 Where fixed stoke hold working pressure 60 lb. Tested by hydraulic pressure to 120 lb. No. of Certificate 1083 2/5
 Fire grate area 22 sq ft. Description of safety valves Direct Spring No. of safety valves 2 area of each 7"
 If fitted with casing gear yes If steam from main boilers can enter the donkey boiler no.
 Diameter of donkey boiler 6'-0" height 13'-0" description of riveting double.
 thickness of shell plates 3/8" steel diameter of rivet holes 3/4" whether punched or drilled punched.
 pitch of rivets 3" lap of plating 3 3/4" per centage of strength of joint 75.
 thickness of crown plates 1/2" stayed by 5 stays 1 1/2" diam.
 Diameter of furnace, top 4'-6 1/2" bottom 5'-3" length of furnace 5'-11"
 thickness of plates 1/2" steel description of joint Lap.
 thickness of furnace crown plates 1/2" steel stayed by 5 stays 1 1/2" diameter.
 Working pressure of shell by rules 78 lbs working pressure of furnace by rules 72 lbs.
 diameter of uptake 15" thickness of plates 3/8" thickness of water tubes 3/8"

The foregoing is a correct description,
 James & George Thomson Manufacturers.

General Remarks (State quality of workmanship, opinions as to class, &c. The above mentioned Engines and Boilers are now completed on board. The material and workmanship good and the machinery is in my opinion in good and safe working condition and eligible to be noted in Society's Register Book.
 * L.M.C. 6.83.

submitted to the
 Board of the
 Register of
 Shipping
 on 25/6/83
 J. & G. Thomson
 Glasgow
 25/6/83

The amount of Entry Fee £ 2: 0: 0 received by me,
 Special £ 18: 0: 0
 Certificate (if required) £ 20/6/83
 (Travelling Expenses, if any, £)
 Committee's Minute TUESDAY 26 JUNE 1883 18

John Anderson
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

