

REPORT ON MACHINERY.

6154

No. 6154
 No. in Survey held at Paisley Date, first Survey Jan 18th (Received at London Office 22nd JUNY, 1883)
 Reg. Book. ΣΦΗΞ Last Survey June 19th 1883
 on the Screw Steamer (Number of Visits 147) Tons 50.59
 Master Paravia Built at Paisley When built 1883
 Engines made at Paisley By whom made Thomas Donald Wilson when made 1883
 Boilers made at Do By whom made Do when made 1883
 Registered Horse Power 40 Owners A. O. Stathatos Port belonging to IOAKHE

ENGINES, &c.—

Description of Engines Inverted Direct Acting - Compound Surface Condensing
 Diameter of Cylinders 16 x 30" Length of Stroke 21" No. of Rev. per minute 110 Point of Cut off, High Pressure 1/2 Low Pressure 1/2
 Diameter of Screw shaft 5 1/4" Diameter of Tunnel shaft 5 1/4" Diameter of Crank shaft journals 5 1/4" Diameter of Crank pin 5 1/4" size of Crank webs 1 1/2 x 6 1/4"
 Diameter of screw 6-6" Pitch of screw 9-6" No. of blades 3 state whether moveable Fixed total surface 1529 sq ft.
 No. of Feed pumps One diameter of ditto 2" Stroke 9" Can one be overhauled while the other is at work —
 No. of Bilge pumps One diameter of ditto 2" Stroke 9" Can one be overhauled while the other is at work —
 Where do they pump from From Bilges
 No. of Donkey Engines One Size of Pumps 2 dia Where do they pump from Sea, Hotwell & Bilge
 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 2 dia Are they connected to condenser, or to circulating pump To Air pump.
 How are the pumps worked By levers from crosshead of 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 except small donkey pump. Are the blow off cocks fitted with a stop 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 No tunnel and fitted with a sluice door — worked from —

BOILERS, &c.—

Number of Boilers One Description Cylindrical - Multitubular
 Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test April 25th 1883
 Description of ~~superheating apparatus~~ on steam chest Vertical dome
 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 25 sq ft Description of safety valves Direct springs
 No. to each boiler Two area of each valve 12.75 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 6"
 Diameter of boilers 9-0" Length of boilers 9-1" description of riveting of shell long. seams Lap 4 fold circum. seams Single Lap
 Thickness of shell plates 2 1/2" diameter of rivet holes 15/16" whether punched or drilled Punched pitch of rivets 3 7/8"
 Lap of plating 6 1/2" per centage of strength of longitudinal joint 75 working pressure of shell by rules 80 lbs
 Size of manholes in shell 15 x 11 1/2" size of compensating rings 4 1/2 x 5/8"
 No. of Furnaces in each boiler Two outside diameter 2-8 3/8" length, top 6-6" bottom 8-3"
 Thickness of plates 7/16" description of joint Lap if rings are fitted Not required greatest length between rings —
 Working pressure of furnace by the rules 80 lbs
 Combustion chamber plating, thickness, sides 1/2" back 7/16" top 7/16"
 Pitch of stays to ditto, sides 7 3/4" back 7 3/4" top 7 3/4"
 If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 90 lbs
 Diameter of stays at smallest part 1 1/8 screw working pressure of ditto by rules 80 lbs
 End plates in steam space, thickness 1/16" pitch of stays to ditto 10 x 13" how stays are secured Nuts
 Working pressure by rules 80 lbs diameter of stays at smallest part 2 1/2 screw working pressure by rules 110 lbs
 Front plates at bottom, thickness 5/8" Back plates, thickness 9/16" greatest pitch of stays 7 3/4" working pressure by rules 160 lbs

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Diameter of tubes $3\frac{1}{4}$ " pitch of tubes $4\frac{1}{2}$ " thickness of tube plates front $\frac{11}{16}$ " back $\frac{11}{16}$ "
How stayed *Lay tubes* pitch of stays width of water spaces 5"
Diameter of Superheater or Steam chest 2-6" length 2-6"
Thickness of plates $\frac{7}{16}$ " description of longitudinal joint *Single* diameter of rivet holes $\frac{15}{16}$ " pitch of rivets $2\frac{1}{2}$ "
Working pressure of shell by rules 130 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 $\frac{9}{16}$ " How stayed *Dished also two stays to shell $1\frac{1}{4}$ " dia*
Superheater or steam chest; how connected to boiler *Riveted to shell plate*

DONKEY BOILER—

Description *No Donkey Boiler*

Made at By whom made when made

Where fixed working pressure Tested by hydraulic pressure to No. of Certificate

Fire grate area Description of safety valves No. of safety valves area of each

If fitted with easing gear If steam from main boilers can 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 per centage 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

The foregoing is a correct description,
Hanna Donald Wilson 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 and workmanship - they have been well fitted on board & satisfactorily tested under steam - I am therefore of opinion that they are eligible to be classed "LLOYD'S M.C." 6-82 in the Register Book.

It is submitted that this vessel is eligible to have the notification of M.C. recorded JM 22/6/83

The amount of Entry Fee £ 1: 0: 0 received by me,
Special £ 8: 0: 0
Certificate (if required) .. £ gratis 21/6/1883
To be sent as per margin.
(Travelling Expenses, if any, £)

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

Committee's Minute FRIDAY 22 JUNE 1883 18