

REPORT ON MACHINERY.

No. 6192

Received at London Office FRIDAY 27 JULY 1883

No. in Survey held at Apr & May
Reg. Book.

Date, first Survey 24th Oct. 1882 Last Survey 19th July 1883

(Number of Visits 22) 338

Tons 148

on the S. S. Methuener

Master Clark Built at Parley

By whom built F. Martin & Co.

When built 1883

Engines made at Parley

By whom made J. & S. Young

when made 1883

Boilers made at Parley

By whom made "

when made 1883

Registered Horse Power 10

Owners James Hay & Son

Port belonging to Glasgow

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting
Diameter of Cylinders 19" & 36" Length of Stroke 27" No. of Rev. per minute 90 Point of Cut off, High Pressure 17" Low Pressure 17"
Diameter of Screw shaft 7" Diam. of ^{Intermediate} Tunnist shaft 6 3/4" Diam. of Crank shaft journals 7" Diam. of Crank pin 7" size of Crank webs 8" x 4"
Diameter of screw 9.6" Pitch of screw 14 feet No. of blades 3 state whether moveable yes total surface 23.75
No. of Feed pumps one diameter of ditto 2" Stroke 27" Can one be overhauled while the other is at work —
No. of Bilge pumps one diameter of ditto 2" Stroke 27" Can one be overhauled while the other is at work —
Where do they pump from Engine Room & Cargo Hold
No. of Donkey Engines one Size of Pumps 4 x 6" Where do they pump from Sea Hot well Bilges & Ballast Tanks
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" Are they connected to condenser, or to circulating pump Circ. pump.
How are the pumps worked By crosshead
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 on ship before vessel was launched & at Apr 19th July
Is the screw shaft tunnel watertight no Leak and fitted with a sluice door — worked from —

BOILERS, &c.—

Number of Boilers one Description Round Horizontal Double Flue Whether Steel or Iron Steel
Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs per sq. in. Date of test 9/7/83
Description of superheating apparatus or steam chest Round Horizontal Pressure
Can each boiler be worked separately — Can the superheater be shut off and the boiler worked separately no superheater
No. of square feet of fire grate surface in each boiler 32 Description of safety valves Direct spring No. to each boiler two
Area of each valve 9.62 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 or woodwork 9" Diameter of boilers 10.9"
Length of boilers 9.6" description of riveting of shell long. seams double butt strap circum. seams double Thickness of shell plates 5/8"
Diameter of rivet holes 7/8" whether punched or drilled punched pitch of rivets 3 3/8" Lap of plating 9 1/2" straps
Per centage of strength of longitudinal joint 75 working pressure of shell by rules 90 lbs size of manholes in shell 16" x 12"
Size of compensating rings 3 1/2" x 3 1/2" x 1/2" No. of Furnaces in each boiler two
Outside diameter 37" length, top 6.0" bottom 8.9" thickness of plates 1/2" description of joint double butt strap if rings are fitted 1 on bottom
Greatest length between rings 4.4" working pressure of furnace by the rules 100 lbs combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"
Pitch of stays to ditto, sides 8" x 8" back 8" x 7 1/2" top 9 1/2" x 8" If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 90 lbs
Pitch of stays to ditto 12" x 12" & 12 1/2" how stays are secured double nuts working pressure by rules 90 lbs diameter of stays at smallest part 1 3/4" working pressure by rules 96 lbs Front plates at bottom, thickness 5/8" Back plates, thickness 5/8"
Greatest pitch of stays 11 1/2" working pressure by rules 91 lbs Diameter of tubes 3 1/2" pitch of tubes 4 3/4" thickness of tube plates, front 5/8" back 5/8" how stayed Stay tubes pitch of stays 9 1/2" x 14 1/2" width of water spaces 5 1/2" to 6 1/2"
Diameter of Superheater or Steam chest 2.5" length 4.6" thickness of plates 1/2" description of longitudinal joint lap double diam. of rivet holes 7/8"
Pitch of rivets 3" working pressure of shell by rules 207 lbs 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 no stays end plates
Superheater or steam chest; how connected to boiler By neck piece 1/4" thick

GLS148-0149

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DONKEY BOILER— Description *Round upright inside steel*
Made at *Warr* by whom made *J & T Young* when made *1883* where fixed *in Halcote*
Working pressure *60 lbs* tested by hydraulic pressure to *120 lbs* No. of Certificate *1117* fire grate area *12.5 sq ft* description of safety valves *Direct spring* No. of safety valves *one* area of each *7.5* if fitted with easing gear *yes* if steam from main boilers can enter the donkey boiler *no* diameter of donkey boiler *4.6* length *9.0* description of riveting *lap double*
Thickness of shell plates *3/8* diameter of rivet holes *3/4* whether punched or drilled *punched* pitch of rivets *2 1/8* lap of plating *1*
per centage of strength of joint *73* thickness of crown plates *7/16* stayed by *Four 1 1/2 bar stays*
Diameter of furnace, top *4.0* bottom *4.1* length of furnace *4.6* thickness of plates *3/8* description of joint *lap single*
Thickness of furnace crown plates *7/16* stayed by *Bar stays* working pressure of shell by rules *60 lbs*
Working pressure of furnace by rules *60 lbs* diameter of uptake *1 1/2* thickness of plates *3/8* thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:— *2 Connecting rod cap and bolts & nuts. 2 bottom end bolts. 2 main bearing bolts. 1 set of coupling bolts. 1 set of feed & bilge pump valves. A quantity of bolts nuts & iron of various sizes.*

The foregoing is a correct description,
J. T. Young Manufacturer

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines & Boilers have been specially surveyed during construction. Workmanship of good quality. And the Engines & Boilers are now in good order and safe working condition and are in our opinion eligible to be noted in the Register Book.* **LLOYD'S M.C. 7.83.**

The amount of Entry Fee £ 1 : : : received by me,
Special £ 9 : : :
Donkey Boiler Fee £ : : : *Grenock*
Certificate (if required) £ : : : *25/7/1883*
To be sent as per margin.

(Travelling Expenses, if any, £ 4.9.9)
Committee's Minute
FRIDAY 27 JULY 1883
+ Muf

Andrew L. Mearns & Walter L. Wilson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
Grenock & Glasgow