

REPORT ON MACHINERY.

SAT. 19 NOV 1898

Port of *Glasgow*

Received at London Office 18

No. in Survey held at
Reg. Book.*Glasgow*Date, first Survey *26 JULY 1898* Last Survey *9. NOVEMBER 1898*(Number of Visits *TWELVE*)

on the

*S. S. "JUPITER."*Tons { Gross *171.98*
Net *52.14*

Master

Built at

Glasgow

By whom built

Mackie & Thompson

When built

1898

Engines made at

Glasgow

By whom made

Muir & Houston

when made

1898

Boilers made at

Glasgow

By whom made

Muir & Houston

when made

1898

Registered Horse Power

Owner

W. WIDDOWSON

Port belonging to

*HULL*Nom. Horse Power as per Section 28 *53.*

Is Electric Light fitted

No.

ENGINES, &c.—Description of Engines

*Triple screw*No. of Cylinders *3*No. of Cranks *3*Diameter of Cylinders *17.19 1/2 + 32"* Length of Stroke *22"* Revolutions per minute *118* Diameter of Screw shaft as per rule *6.48"*Diameter of Tunnel shaft as fitted *✓* Diameter of Crank shaft journals *6 5/8"* Diameter of Crank pin *6 5/8"* Size of Crank webs *4 1/4" thick*Diameter of screw *8.6"* Pitch of screw *9.0 to 10.9* No. of blades *4* State whether moveable *no* Total surface *25 sq. ft.*No. of Feed pumps *1* Diameter of ditto *2 1/4"* Stroke *11"* Can one be overhauled while the other is at work *✓*No. of Bilge pumps *1* Diameter of ditto *2 1/4"* Stroke *11"* Can one be overhauled while the other is at work *✓*No. of Donkey Engines *one* Sizes of Pumps *1 1/2" x 3" x 4"* No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room *Two 2"* + *1-3" Ejector* In Holds, &c. *Two 2"*No. of bilge injections *1* sizes *2 1/2"* Connected to condenser, or to circulating pump *pumps* Is a separate donkey suction fitted in Engine room & size *yes 2"*Are all the bilge suction pipes fitted with roses *yes* Are the roses in Engine room always accessible *yes* Are the sluices on Engine room bulkheads always accessible *✓*Are all connections with the sea direct on the skin of the ship *yes.* Are they Valves or Cocks *valves & cocks.*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 and all boiler mountings accessible at all times *yes.*Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges *yes.*When were stern tube, propeller, screw shaft, and all connections examined in dry dock *before launch* Is the screw shaft tunnel watertight *✓*Is it fitted with a watertight door *✓* worked from *✓*

BOILERS, &c.—

(Letter for record

(S) Total Heating Surface of Boilers

*800 sq. ft.*Is forced draft fitted *no.*No. and Description of Boilers *1 Single ended multitubular* Working Pressure *200* Tested by hydraulic pressure to *400*Date of test *22/10/98* Can each boiler be worked separately *✓* Area of fire grate in each boiler *33 sq. ft.* No. and Description of safety valves toeach boiler *2 Patent Spring* Area of each valve *3.14"* Pressure to which they are adjusted *200 lbs* Are they fittedwith easing gear *yes* Smallest distance between boilers or uptakes and bunkers or woodwork *14"* Mean diameter of boilers *10.6"*Length *9.0"* Material of shell plates *steel* Thickness *31/32* Description of riveting: circum. seams *double* long. seams *treble.*Diameter of rivet holes in long. seams *1 1/8"* Pitch of rivets *8"* Lap of plates or width of butt straps *14"*Per centages of strength of longitudinal joint *95* Working pressure of shell by rules *200 lbs* Size of manhole in shell *16 x 12"*Size of compensating ring *Mr. Keils* No. and Description of Furnaces in each boiler *2 Fox's* Material *steel* Outside diameter *38"*Length of plain part *top* Thickness of plates *bottom* *17/32* Description of longitudinal joint *welded* No. of strengthening rings *✓*Working pressure of furnace by the rules *215* Combustion chamber plates: Material *steel* Thickness: Sides *5/8"* Back *5/8"* Top *5/8"* Bottom *7/8"*Pitch of stays to ditto: Sides *8 x 8"* Back *8 x 8"* Top *8 x 4 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *211*Material of stays *steel* Diameter at smallest part *1.43"* Area supported by each stay *64"* Working pressure by rules *216* End plates in steam space:Material *steel* Thickness *1* Pitch of stays *15 x 15"* How are stays secured *nuts* Working pressure by rules *210* Material of stays *steel*Area at smallest part *5.34"* Area supported by each stay *225"* Working pressure by rules *237* Material of Front plates at bottom *steel*Thickness *13/16"* Material of Lower back plate *steel* Thickness *13/16"* Greatest pitch of stays *12 1/2 x 8"* Working pressure of plate by rules *214*Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2 x 4 1/2"* Material of tube plates *steel* Thickness: Front *13/16"* Back *13/16"* Mean pitch of stays *9"*Pitch across wide water spaces *14"* Working pressures by rules *218"* Girders to Chamber tops: Material *Iron* Depth andthickness of girder at centre *4 1/2 x 1 1/2"* Length as per rule *26"* Distance apart *4 1/2"* Number and pitch of Stays in each *2-8"*Working pressure by rules *216* Superheater or Steam chest; how connected to boiler *✓* Can the superheater be shut off and the boiler workedseparately *✓* Diameter *✓* Length *✓* Thickness of shell plates *✓* Material *✓* Description of longitudinal joint *✓* Diam. of rivetholes *✓* Pitch of rivets *✓* Working pressure of shell by rules *✓* Diameter of flue *✓* Material of flue plates *✓* Thickness *✓*If stiffened with rings *✓* Distance between rings *✓* Working pressure by rules *✓* End plates: Thickness *✓* How stayed *✓*Working pressure of end plates *✓* Area of safety valves to superheater *✓* Are they fitted with easing gear *✓*

GLS182-0238

Lloyd's Register
Foundation

16562.29

DONKEY BOILER— Description *None*

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 ☒ Pressure to which they are adjusted ☒ If fitted with easing gear ☒ If steam from main boilers can enter the donkey boiler ☒

Diameter of donkey boiler ☒ Length ☒ Material of shell plates ☒ Thickness ☒

Description of riveting long. seams ☒ Diameter of rivet holes ☒ Whether punched or drilled ☒ Pitch of rivets ☒

Lap of plating ☒ Per centage of strength of joint ☒ Rivets ☒ Thickness of shell crown plates ☒ Radius of do. ☒ No. of Stays to do. ☒

Dia. of stays ☒ Diameter of furnace Top ☒ Bottom ☒ Length of furnace ☒ Thickness of furnace 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 uptake plates ☒ Thickness of water tubes ☒

SPARE GEAR. State the articles supplied:— *2 Top end & 2 bottom end connecting rod bolts, 2 Main bearing bolts, 1 set coupling bolts, 1 set Feed & bilge pump valves &c.*

The foregoing is a correct description,

Main & Houston Ltd Manufacturer.

James Stewart 1898:— JULY, 26. SEP. 28. 30. OCT. 3. 7. 8. 10. 15. 18. 22. 26. NOV. 9.

Dates { During progress of work in shops - -
of Survey { During erection on board vessel - -
while building { Total No. of visits **TWELVE**

General Remarks (State quality of workmanship, opinions as to class, &c.)

ENGINES—Length of stern bush *2' 6"* Diameter of crank shaft journals *as per rule 6.75* Diameter of thrust shaft under collars *as fitted 6.58* *6 7/8"*

BOILERS—Range of tensile strength *28 to 32* Are they welded or flanged *neither* **DONKEY BOILERS**—No. ☒ Range of tensile strength ☒

Is the approved plan of main boiler forwarded herewith *Yes* Is the approved plan of donkey boiler forwarded herewith ☒

The machinery of this vessel has been built under special survey, the material & workmanship is of good quality, and it has been securely fastened in place. The machinery has been tried under steam & found satisfactory, and is now in, my opinion, eligible to be classed in the Register Book & to have a record L.M.C. 11. 98 noted therein.

It is submitted that this vessel is eligible for THE RECORD. L.M.C. 11. 98.

A.C.H.
E.S. 21. 11. 98
21. 11. 98

GLASGOW

Certificate (if required) to be sent to Committee's Minute.

The amount of Entry Fee... £ *1* : : : When applied for, *9. 11. 98*

Special ... £ *8* : : : When received, *17. 11. 98*

Donkey Boiler Fee ... £ : : : *17. 11. 98*

Travelling Expenses (if any) £ : : : *17. 11. 98*

Committee's Minute **TUES. 22 NOV 1898**

Assigned *+ L.M.C. 11. 98*

J.W. Dimmock
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

