

REPORT ON MACHINERY.

3833

MON 8 DEC 1890

To. 3833 Port of Belfast Received at London Office

No. in Survey held at Belfast Date, first Survey Bel 7th June Last Survey 3rd Dec. 1890

Reg. Book: Sup^t (Number of Visits 26 Bel.)

on the Machinery of the S/s Parkmore Tons { Gross 3318
Net 2136

A. Hawkett Built at Londonderry By whom built Charles J. Bigger When built 1890

es made at Liverpool & Belfast By whom made S. Forrester & Co. Ltd when made 1890

made at do By whom made do when made 1890

Registered Horse Power 354 Owners W. H. Johnston & Co Port belonging to Liverpool

GINES, &c.—

Description of Engines See compound 3 cranks O.I.S.C. No. of Cylinders Three

Diam. of Cylinders 26-42-67 Length of Stroke 51 Rev. per minute 62 Point of Cut off, High Pressure 7/16 Low Pressure 7/16

Diameter of Screw shaft 13 1/2 Diam. of Tunnel shaft 12 1/2 Diam. of Crank shaft journals 13 1/2 Diam. of Crank pin 13 1/2 size of Crank webs 7 1/2 inches

Diameter of screw 18-0 Pitch of screw 18-6 No. of blades 4 state whether moreable no total surface 85 sq. ft.

No. of Feed pumps 2 diameter of ditto 4 1/2 Stroke 26 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 diameter of ditto 5 Stroke 26 Can one be overhauled while the other is at work Yes

Where do they pump from Feed from Hotwell Bilge from all holds & 1/10 space and tunnel.

No. of Donkey Engines Two and Size of Pumps one 6 in. 6 in. 5 in. 5 in. Where do they pump from Sea, condenser, ballast

and exhaust tanks, Wapovator, Hotwell, all bilges in holds & 1/10 space & tunnel.

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 7 1/2 Are they connected to condenser, or to circulating pump See Suction. Cent. pump.

How are the pumps worked By links and levers from crosshead of Centre 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

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 Yes

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

Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Upper deck.

ILERS, &c.—

No. of Boilers 2 Description ble ended. Cor. Multiz Material Steel Letter (for record)

Working Pressure 160 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 16th Sept 1890. Cork. 90

Description of superheating apparatus or steam chest none fitted

Can each boiler be worked separately Yes Can the superheater be shut off and the boiler worked separately Yes

No. of square feet of fire grate surface in each boiler 92 Description of safety valves O. Cockburn No. to each boiler 2

Area of each valve 14.19 sq. in. Are they fitted with easing gear Yes No. of safety valves to superheater 1 area of each valve 1

Are they fitted with easing gear Yes Smallest distance between boilers and bunkers or woodwork 20" Diameter of boilers 13'-6"

Length of boilers 16'-6" description of riveting of shell long. seams ble butt joints circum. seams ble & double Thickness of shell plates 1 3/16"

Diameter of rivet holes 1 3/16" whether punched or drilled drilled pitch of rivets 7 7/8" Lap of plating 1 1/2" x 1 1/2" S.

Percentage of strength of longitudinal joint 88 working pressure of shell by rules 165 lbs. size of manholes in shell 12 x 16

No. of compensating rings Mr. Heile Pt No. of Furnaces in each boiler 4 Description of Furnaces Fox's Pt. Corrugated

Inside diameter 50" length 6'-0" thickness of plates 5" description of joint Welded if rings are fitted Yes

Greatest length between rings working pressure of furnace by the rules 160 lbs. combustion chamber plating, thickness, sides 9" back 19" top 32"

Pitch of stays to ditto, sides 4 1/2" back 8 1/2" x 7 1/2" stays are fitted with nuts or riveted heads nutted working pressure of plating by rules 162 lbs.

Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 197 lbs. and plates in steam space, thickness 1" bluing 15"

Pitch of stays to ditto 20" how stays are secured ble nuts working pressure by rules 168 lbs. diameter of stays at smallest part 3 1/2" steel

working pressure by rules 173 lbs. Front plates at bottom, thickness 5" Back plates, thickness 5"

Greatest pitch of stays working pressure by rules Diameter of tubes 3 1/2" pitch of tubes 4 1/2" x 4 1/2" thickness of tube 1 1/2"

plates, front 1" back 1" how stayed stay tube pitch of stays 9 1/2" x 9 1/2" width of water spaces See C.C. 625

Diameter of Superheater or Steam chest length thickness of plates description of longitudinal joint diam. of rivet holes See C.C. 625

Pitch of rivets working pressure of shell by rules diameter of flue thickness of plates If stiffened with rings Yes

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

notes
J. J. W.
8. 12. 90

DONKEY BOILER— Description *Cir. Single ended. Multi-Steel with 2 furnaces*
 Made at *Liverpool* by whom made *S. Forester & Co. Ltd.* when made *1890* where fixed *Apt. Stockholm*
 Working pressure *160 lbs* tested by hydraulic pressure to *320 lbs* No. of Certificate *90* fire grate area *29 sq. ft.* description of safety
 valves *2 Cockburn's Pat.* No. of safety valves *2* area of each *3.98* if fitted with easing gear *Yes* if steam from main boilers can
 enter the donkey boiler *No* diameter of donkey boiler *9'-2"* length *9'-0"* description of riveting *1813. 5 rivets in one pitch*
 Thickness of shell plates *13/16"* diameter of rivet holes *13/16"* whether punched or drilled *Drilled* pitch of rivets *5 7/8"* lap of plating *2 1/2"*
 per centage of strength of joint *86* thickness of *lute* plates *13/16" + 1/16"* stayed by *2 1/2" iron stays 15 1/2" pitch and double nuts.*
 Diameter of furnace, top *34"* bottom *34"* length of furnace *6'-0"* thickness of plates *3/8"* description of joint *Welded*
 Thickness of furnace crown plates *2 1/4" 3/4"* stayed by *Screw stays Steel 1 1/2" pitched 7 1/4" top with pressure of shell by rules 164 lbs.*
 Working pressure of furnace by rules *162 lbs.* diameter of uptake *✓* thickness of plates *✓* thickness of water tubes *✓*

SPARE GEAR. State the articles supplied:— *one propeller, one length of crank shaft, one set of
 bolts & nuts for one Con. rod; 12 coupling bolts & nuts, 2 main bearing bolts & nuts;
 6 pin & ring bolts, 2 feed & 2 bilge pump valves; one pair crank pin brasses;
 air pump rod, bucket, head valve & valves complete, piston packing rings for all
 cylinders. etc. etc.*
 The foregoing is a correct description,
 Manufacturer.

See letter

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

*The machinery of this steamer was mainly constructed at
 Liverpool and finished and put on board at Belfast, in accordance
 with the enclosed approved plans of main and auxiliary boilers,
 as amended; the rules of the Society for new machinery, and to the
 satisfaction of the undersigned.*

*The shafting when finished was examined and found free
 from visible defect. The main and auxiliary boilers and
 main steam pipes were tested, as required, to twice the working
 pressure and showed no signs of weakness or leakage and the
 material and workmanship throughout were good & satisfactory.*

*The main and auxiliary engines were tried under steam at
 full speed and gave entire satisfaction, and the safety valves
 were adjusted on all boilers to 160 lbs. working pressure.*

*I am of opinion that the machinery merits the
 Special Notification +L.M.C. 12-90 and respectfully recommend
 that the same be granted and recorded in the Reg. Bk.*

Note.

*The Electric Light is fitted throughout this vessel on the
 "single wire" principle (cable wires in way of compasses) and the
 requirements of Circular N^o 483 complied with as far as practicable.
 It is submitted that this vessel is
 eligible to have +L.M.C. 12-90 recorded*

W.A.

8-12-90

The amount of Entry Fee £ 3 : 0 : 0 received by me,

Special .. £ 37 : 14 : 0

Donkey Boiler Fee .. £ :

Certificate (if required) .. £ 3 ratio: 3/11 18/11

To be sent as per margin.

(Travelling Expenses, if any, £)

Committee's Minute

TUES 9 DEC 1890

FRI 12 DEC 1890

+ Lmb 12/90

James Ellaxton

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



Lloyd's Register
Foundation