

REPORT ON MACHINERY.

2993

No. 2993

Received at London Office MONDAY 22 OCT 1883

No. in Survey held at Belfast Date, first Survey 21st March Last Survey 16th Decr. 1883.
Reg. Book. (Number of Visits 12) 274.3
on the S. J. Sea Fisher Tons 134.3

Master J. Bamister Built at Belfast By whom built MacMevaine Lewis & Co. Ltd. When built 1883.
Engines made at Belfast By whom made MacMevaine Lewis & Co. Ltd. when made 1883.
Boilers made at Belfast By whom made " when made 1883.
Registered Horse Power 50 Owners Jas Fisher & Sons Port belonging to Barron.

ENGINES, &c.—

Description of Engines Compound, Vertical, Surface Condensing
Diameter of Cylinders 19.532 Length of Stroke 29 No. of Rev. per minute 85 Point of Cut off, High Pressure 6 Low Pressure 6
Diameter of Screw shaft 0 Diam. of Tunnel shaft 6 Diam. of Crank shaft journals 6 Diam. of Crank pin 6 size of Crank webs 6 7/8 x 4 1/2
Diameter of screw 9-0 Pitch of screw 12-6 No. of blades 4 state whether moveable yes total surface about 23 sq feet
No. of Feed pumps One diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work yes
No. of Bilge pumps One diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work yes
Where do they pump from engine room, fore and after holds.
No. of Donkey Engines One Size of Pumps 3 dia x 6 Stroke Where do they pump from as bilge pump, also from sea & fore & after holds.
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 dia Are they connected to condenser, or to circulating pump Circulating pump.
How are the pumps worked by levers from after engine
Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both Valves and 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 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 new vessel
Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from top platform

BOILERS, &c.—

Number of Boilers One Description upright Multi-tubular Whether Steel or Iron Steel
Working Pressure 75 lbs Tested by hydraulic pressure to 150 lbs Date of test 13-9-13.
Description of superheating apparatus or steam chest None
Can each boiler be worked separately yes Can the superheater be shut off and the boiler worked separately No Superheater.
No. of square feet of fire grate surface in each boiler 33 Description of safety valves Spring No. to each boiler Two
Area of each valve 8.312 Are they fitted with easing gear yes No. of safety valves to superheater — area of each valve —
Are they fitted with easing gear yes Smallest distance between boilers and bunkers or woodwork 5 Diameter of boilers 11-0
Length of boilers 9-0 description of riveting of shell long. seams DB Shape, DR Rivt circum. seams Col. St. Rivt Thickness of shell plates 7/8
Diameter of rivet holes 13/16 whether punched or drilled drilled pitch of rivets 3 Lap of plating Butt joints 1 1/2 wide
Per centage of strength of longitudinal joint 71 working pressure of shell by rules 84 lbs size of manholes in shell 15 x 12
Size of compensating rings 5 x 7/8 No. of Furnaces in each boiler Two
Outside diameter 36 3/8 length, top 6-0 bottom 8-0 thickness of plates 7/16 description of joint DB Shape, S Rivt if rings are fitted to bottom.
Greatest length between rings 6-0 working pressure of furnace by the rules 78 lbs combustion chamber plating, thickness, sides 7/16 back 7/16 top 7/16
Pitch of stays to ditto, sides 8 3/4 x 8 3/8 back 8 3/4 x 8 3/8 top 8 3/4 x 8 1/2 If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 75 lbs Diameter of stays at smallest part 1 1/8 working pressure of ditto by rules 88 lbs end plates in steam space, thickness 1/16
Pitch of stays to ditto 15 x 15 how stays are secured nuts & washers working pressure by rules 75.3 lbs diameter of stays at smallest part 2 working pressure by rules 83 lbs Front plates at bottom, thickness 9/16 Back plates, thickness 9/16
Greatest pitch of stays 11 working pressure by rules 80 lbs Diameter of tubes 3 pitch of tubes 4 3/8 x 4 3/8 thickness of tube plates, front 7/8 back 7/8 how stayed Stay Tubes pitch of stays 13 1/4 x 13 1/8 width of water spaces 1 3/8
Diameter of Superheater or Steam chest — length — thickness of plates — description of longitudinal joint — diam. of rivet holes —
Pitch of rivets — working pressure of shell by rules — 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 — how stayed —
Superheater or steam chest; how connected to boiler —

Lloyd's Register Foundation

DONKEY BOILER— Description *Cylindrical Vertical with Furnace*
 Made at *Belfast* by whom made *MacGowan Lewis & Co. Ltd.* when made *13/9/83* where fixed *St. Helens*
 Working pressure *53 lb* tested by hydraulic pressure to *106 lb* No. of Certificate *49* fire grate area *12 1/2 sq ft* description of safety
 valves *Spring* No. of safety valves *One* area of each *7.075* if fitted with easing gear *yes* if steam from main boilers can
 enter the donkey boiler *No* diameter of donkey boiler *4-9* length *8-6* description of riveting *Lang's Patent*
 Thickness of shell plates *3/8 (Steel)* diameter of rivet holes *1/6* whether punched or drilled *drilled* pitch of rivets *2 1/2* lap of plating *4 1/8*
 per centage of strength of joint *67.5* thickness of crown plates *7/16* stayed by *by lextate*
 Diameter of furnace, top *45* bottom *50* length of furnace *5-0* thickness of plates *3/8* description of joint *Lang's Patent*
 Thickness of furnace crown plates *7/16* stayed by *as Shell Curve* working pressure of shell by rules *88.7 lb*
 Working pressure of furnace by rules *53 lb* diameter of uptake *13"* thickness of plates *7/16* thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:— *Two Spare Propeller Rods, two connecting rods*
two bottom end bolts nuts, two main bearing bolts, one set coupling bolts,
one feed pump valve, one tie pump valve, one set piston springs, a
quantity of assorted bolts, nuts, and provisions sizes.
 The foregoing is a correct description,
 Manufacturer: *MacGowan Lewis & Co. Ltd.*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The Machinery and Boilers of this vessel have been constructed under
Special Survey. Material and workmanship good and satisfactory.
The engines and boilers of this vessel are in good order and safe
working condition and, in my opinion, eligible to receive the notice
of the Register.

It is submitted that this vessel
 is eligible to have the notification
 of the Register recorded.
 B.P.
 22/10/83

The amount of Entry Fee .. £ 1 : - : * received by me,
 Special £ 8 : - : -
 Donkey Boiler Fee £ - : - : -
 Certificate (if required) .. £ - : - : *19.10.1883*
 To be sent as per margin.
 (Travelling Expenses, if any, £ 7-7-0)

Committee's Minute
 FRIDAY 26 OCT 1883
[Signature]

Quean R. [Signature]
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping