

REPORT ON MACHINERY.

24720

Port of *Roscouët*

Received at London Office **WED 17 SEPT 1890**

No. *24720*
Survey held at *Roscouët*
eg. Book.

Date, first Survey *22nd March* Last Survey *4th Sept 1890*
(Number of Visits *18*) *2894.6*
Tons *1889.01*

on the *S.S. Radnorshire*
Master *E. Davies* Built at *Roscouët* By whom built *Loan & Hunter* When built *1890*
Engines made at *Roscouët* By whom made *Galbraith Shipway & Co.* when made *1890*
Boilers made at *Do* By whom made *Do* when made *1890*
Registered Horse Power *350* Owners *N. J. Jenkins* Port belonging to *London*

ENGINES, &c.—

Description of Engines *Triple expansion Surface Condensing*
Diameter of Cylinders *23.58* Length of Stroke *39* No. of Rev. per minute *68* Point of Cut off, High Pressure *.63* Low Pressure *.64*
Diameter of Screw shaft *11½* Diam. of Tunnel shaft *10½* Diam. of Crank shaft journals *11½* Diam. of Crank pin *11½* size of Crank webs *8x14*
Diameter of screw *14.6* Pitch of screw *14.9* No. of blades *4* state whether moveable *No* total surface *658*
No. of Feed pumps *2* diameter of ditto *3* Stroke *24* Can one be overhauled while the other is at work *Yes*
No. of Bilge pumps *2* diameter of ditto *4* Stroke *24* Can one be overhauled while the other is at work *Yes*
Where do they pump from *Hot well. Engine space. Tanks. Holds. after well & Sea*
No. of Donkey Engines *2* Size of Pumps *6x4x6 & 6x4½x6* Where do they pump from *Hot well. Engine space. Tanks. Holds. after well & Sea*
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 *1* and sizes *4½* Are they connected to condenser, or to circulating pump *Circulating pump*
How are the pumps worked *Levers over Condenser*
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 *new hull*
Is the screw shaft tunnel watertight *—* and fitted with a sluice door *Yes* worked from *Upper platforms*

BOILERS, &c.—

Number of Boilers *2* Description *Cylindrical Single End* Whether Steel or Iron *Steel*
Working Pressure *160* Tested by hydraulic pressure to *320* Date of test *5.5.90 by J. C. 3223*
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. of square feet of fire grate surface in each boiler *54* Description of safety valves *Spring* No. to each boiler *2*
Area of each valve *7.04* 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 *11½"* Diameter of boilers *14.6"*
Length of boilers *10.1* description of riveting of shell long. seams *B. B. metal* circum. seams *Lap double* Thickness of shell plates *1½"*
Diameter of rivet holes *1¼"* whether punched or drilled *Drilled* pitch of rivets *8"* Lap of plating *18"*
Percentage of strength of longitudinal joint *84.375* working pressure of shell by rules *161* size of manholes in shell *16x12*
Size of compensating rings *8x1½"* No. of Furnaces in each boiler *3*
Outside diameter *33½"* length, top *7.3* bottom *7.3* thickness of plates *12½"* description of joint *Welded* if rings are fitted *Ribs*
Greatest length between rings *9"* working pressure of furnace by the rules *164* combustion chamber plating, thickness, sides *5/8* back *5/8* top *5/8*
Pitch of stays to ditto, sides *8½"* back *8½"* top *8½"* If stays are fitted with nuts or riveted heads *Nuts* working pressure of plating by rules *166* Diameter of stays at smallest part *1½"* working pressure of ditto by rules *164* end plates in steam space, thickness *1"*
Pitch of stays to ditto *No plan* how stays are secured *N. J. Jenkins* working pressure by rules *160* diameter of stays at smallest part *2¼"* working pressure by rules *160* Front plates at bottom, thickness *13/16"* Back plates, thickness *5/8"*
Greatest pitch of stays *12"* working pressure by rules *160* Diameter of tubes *3¼"* pitch of tubes *No plan* thickness of tube plates, front *5/8"* back *5/8"* how stayed *Laps* pitch of stays *No plan* width of water spaces *6"*
Diameter of Superheater or Steam chest *None* 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 *—*

Report read 16/9/90 sent to Com 16/9/90

Description of furnaces

72WC816-0041

DONKEY BOILER— Description *vertical with four crop tubes*
 Made at *Stockton* by whom made *Riley Bros* when made *12.7.90* where fixed *Stockton*
 Working pressure *80 lb* tested by hydraulic pressure to *1760* No. of Certificate *1071* fire grate area *27* description of safety
 valves *Spring* No. of safety valves *2* area of each *4.91* if fitted with easing gear *3.68* if steam from main boilers can
 enter the donkey boiler *no* diameter of donkey boiler *7.0* length *14.0* description of riveting *Lap donkey*
 Thickness of shell plates *7/16* diameter of rivet holes *13/16* whether punched or drilled *drilled* pitch of rivets *2 1/2* lap of plating *4 1/2*
 per centage of strength of joint *71.7* thickness of crown plates *7/16* stayed by *7 Stay 1 1/2" off diam*
 Diameter of furnace, top *6.5* bottom *6.0 1/2* length of furnace *5.5* thickness of plates *5/8* description of joint *Lap Rivets*
 Thickness of furnace crown plates *7/16* stayed by *Same as shell crown* working pressure of shell by rule *80.*
 Working pressure of furnace by rules *80 lb* diameter of uptake *1 1/2* thickness of plates *7/16* thickness of water tubes *5/8*

SPARE GEAR. State the articles supplied:— *Propeller & Shaft. 3rd part crank shaft*
2 main bearing bolts & nuts. 2 top end bolts & nuts. 2 bottom
end bolts & nuts. 1 set of shaft coupling bolts & nuts. 1 set of
valves. 1 set of tilge valves. piston springs. nuts & bolts & lion.

The foregoing is a correct description,

FOR THE WALLSEND SLIPWAY ENGINEERING CO. LD.

L. Rusden

Manufacturer.
Manager.

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

The machinery has been
Specially Surveyed during construction the material and
workmanship good and renders the vessel eligible in my
opinion to have the Record + L.M.C. 9.90 in the Register
Book of the Society.

Heating Surface as per rules = 3900 sq

H.P. as per rules = 246 H.P.

This vessel is fitted with the Electric light on the donkey engine
system but will only be used for loading & discharging
cargoes.

It is submitted that this vessel is
eligible to have + L.M.C. 9.90 recorded
M.A.

18 9 20

The amount of Entry Fee .. £ 2 : - : - received by me,

Special .. £ 32 : 6 : -

Donkey Boiler Fee .. £ - : - : -

Certificate (if required) .. gratis

To be sent as per margin.

(Travelling Expenses, if any, £ ..)

Committee's Minute

FRI 19 SEPT 1890

+ L.M.C. 9.90

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

Lloyd's Register
 Foundation