

# REPORT ON MACHINERY.

No. 6564 Port of Newcastle Received at London Office MON. 16 NOV 1891  
 No. in Survey held at Newcastle Date, first Survey 8 July 1891 Last Survey 9 Nov 1891  
 Reg. Book. S.S. "Minister Sabban Portoliet" (Number of Visits 191)  
 on the S.S. "Minister Sabban Portoliet" Tons { Gross 665 Net 281  
 Master A.W. Cooper Built at Newcastle By whom built P. Dobson & Co When built 1891  
 Engines made at Newcastle By whom made North Eastern Marine Eng. Co when made 1891  
 Boilers made at do By whom made do when made 1891  
 Registered Horse Power 130 Owners Island S. S. Co Port belonging to Hushing

GINES, &c.—  
 Description of Engines Triple expansion Surface Condensing No. of Cylinders 3  
 diam. of Cylinders 19.31.5-1 Length of Stroke 33 Rev. per minute 90 Point of Cut off, High Pressure 6 1/2% Low Pressure 5 1/2%  
 diameter of Screw shaft 9 1/2 Diam. of Tunnel shaft 9 Diam. of Crank shaft journals 9 1/2 Diam. of Crank pin 9 1/2 size of Crank webs 6 1/2 x 13  
 diameter of screw 12.3 Pitch of screw 14.3 No. of blades 4 state whether moveable no total surface 25.5  
 No. of Feed pumps 2 diameter of ditto 3 Stroke 18 Can one be overhauled while the other is at work yes  
 No. of Bilge pumps 2 diameter of ditto 3 Stroke 18 Can one be overhauled while the other is at work yes  
 Where do they pump from Hot well. Tanks. Engine Space. Hold. After well & Sea.  
 No. of Donkey Engines 2 Size of Pumps 7" Centrifugal 3 1/2 x 6 Where do they pump from Hot well. Tanks. Sea  
 After well. Hot well & Engine Space.  
 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 4 Are they connected to condenser, or to circulating pump Circulating pump  
 Are the pumps worked Leads 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  
 Are all pipes 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  
 Were stern tube, propeller, screw shaft, and all connections examined in dry dock new keel  
 Is the screw shaft tunnel watertight — and fitted with a sluice door yes worked from Upper platform

BOILERS, &c.—  
 No. of Boilers 2 Description Cylindrical Infl. and Material Steel Letter (for record) —  
 Working Pressure 100 lb Tested by hydraulic pressure to 320 lb Date of test 30.9.91 by CU 3716  
 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 —  
 Area of square feet of fire grate surface in each boiler 43 Description of safety valves Spring No. to each boiler 2  
 Area of each valve 7.07 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 16" Ship Side Diameter of boilers 12.6"  
 Thickness of boilers 9.9" description of riveting of shell long. seam Lap 4 rows circum. seams Lap double Thickness of shell plates 1 1/2"  
 Diameter of rivet holes 1 1/2" whether punched or drilled Drilled pitch of rivets 9" Lap of plating 13 3/8"  
 Percentage of strength of longitudinal joint 82.45 working pressure of shell by rules 100 size of manholes in shell 16" x 12"  
 No. of compensating rings — No. of Furnaces in each boiler 3 Description of Furnaces Plain  
 Inside diameter 3.0" length 6.3" thickness of plates 2 1/2" description of joint RTB Stamps if rings are fitted 1/2"  
 Shortest length between rings 4.3" working pressure of furnace by the rules 100 combustion chamber plating, thickness, sides 9/16" back 5/8" top 9/16"  
 No. of stays to ditto, sides 7 1/2 back 8 1/2" top 7 1/2" If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 100  
 Diameter of stays at smallest part 1 3/8" x 1 1/8" working pressure of ditto by rules 194 end plates in steam space, thickness 1 1/2"  
 No. of stays to ditto 18 x 18" how stays are secured On Washers working pressure by rules 100 diameter of stays at smallest part 2 3/4"  
 working pressure by rules 165 Front plates at bottom, thickness 3/4" Back plates, thickness 3/4"  
 Shortest pitch of stays 11" working pressure by rules 160 Diameter of tubes 3 1/4" pitch of tubes 4 1/2" thickness of tube plates, front 3/4" back 3/4" how stayed Lakes pitch of stays 9" width of water spaces 5"  
 Diameter of Superheater or Steam chest none length — thickness of plates — description of longitudinal joint — diam. of rivet holes —  
 No. of rivets — working pressure of shell by rules — diameter of flue — thickness of plates — If stiffened with rings —  
 Space between rings — working pressure by rules — end plates of superheater, or steam chest; thickness — how stayed —  
 Superheater or steam chest; how connected to boiler —



DONKEY BOILER— Description *vertical with pig crop take*  
Made at *Gateshead* by whom made *Clarke Chapman & Co* when made *2.10.91* where fixed *Record*  
Working pressure *100 lb* tested by hydraulic pressure to *200 lb* No. of Certificate *3720* fire grate area *19.63* description of safety  
valves *Spring* No. of safety valves *2* area of each *5.94* if fitted with easing gear *yes* if steam from main boilers can  
enter the donkey boiler *no* diameter of donkey boiler *6.0* length *11.0* description of riveting *Lap double*  
Thickness of shell plates *1 1/2* diameter of rivet holes *1 1/2* whether punched or drilled *Drilled* pitch of rivets *3 1/2* lap of plating *4 1/4*  
per centage of strength of joint *90* thickness of crown plates *1 1/2* stayed by *8 Strap 1 1/2" off chain*  
Diameter of furnace, top *4.8* bottom *5.2* length of furnace *5.3* thickness of plates *5/8* description of joint *Lap Single*  
Thickness of furnace crown plates *9/16* stayed by *Same as shell crown* working pressure of shell by rules *111 lb*  
Working pressure of furnace by rules *130* diameter of uptake *15* thickness of plates *1/2* thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:— *Propeller Shaft and propeller. 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 feed valves. 1 set of bilge valves. 100 Condenser  
tubes. Nuts bolts & iron assorted.*

The foregoing is a correct description,

FOR AND ON BEHALF OF THE NORTH EASTERN  
MARINE ENGINEERING COMPANY, LIMITED.

Manufacturer.

*W. H. Kingston.*

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

*The machinery has been  
Specially Surveyed during construction the materials & workmanship  
found & renders the vessel eligible in my opinion to have the  
Record + L M C 11.91 in the Register Book of the Society.*

Heating Surface in (2) main boilers = 2640 sq  
H.P. as per Rules = 162 H.P.

Certificate (if required) to be sent to

The amount of Entry Fee .. £ *2* : : : received by me,  
Special .. £ *14* : *6* :  
Donkey Boiler Fee .. £ *n.a.*

(Travelling Expenses, if any, £ )

Committee's Minute *TUES. 17 NOV 1891*

*+ L M C 11/91*

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



Lloyd's Register  
Foundation