

# REPORT ON MACHINERY.

No. 6658.

Port of Belfast Received at London Office FRI 8 SEP 1909  
 No. in Survey held at Belfast Date, first Survey 23 Dec 1908 Last Survey 2 Sep 1909  
 Reg. Book. B. Gabriel II (Number of Visits 37)  
 on the B. Gabriel II Gross Tons 1909  
 Master W. Nelson Built at Dublin By whom built Dublin Dockyard  
 Engines made at Belfast By whom made Marshall & Co when made 1909  
 Boilers made at Glasgow By whom made W. R. Cameron & Co when made 1909  
 Registered Horse Power \_\_\_\_\_ Owners W. Nelson & Co & James Bay Ltd Port belonging to Liverpool  
 Nom. Horse Power as per Section 28 134 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

**ENGINES, &c.**—Description of Engines Compound Reciprocating No. of Cylinders 2 No. of Cranks 2  
 Dia. of Cylinders 19 1/2 - 46 Length of Stroke 30 Revs. per minute 110 Dia. of Screw shaft 9 1/2 Material of screw shaft S. Tub  
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight in the propeller boss Yes  
 If the liner is in more than one length are the joints burned U If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive U  
 If two liners are fitted, is the shaft lapped or protected between the liners U Length of stern bush 44  
 Dia. of Tunnel shaft as per rule 9 1/2 Dia. of Crank shaft journals as per rule 9 1/2 Dia. of Crank pin 9 1/2 Size of Crank webs 16 1/2 x 6 1/2 Dia. of thrust shaft under collars 9 1/2 Dia. of screw 11 - 0 Pitch of Screw 12 - 6 No. of Blades 4 State whether moveable No Total surface 45 sq ft.  
 No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 16 Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 16 Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines 3 Sizes of pumps 6 x 4 1/2 x 6 - Duplex No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room 2 - 3 In Holds, &c. 1 - 2 1/2

No. of Bilge Injections / sizes 4 Connected to condenser, or to circulating pump Pumps a separate Donkey Suction fitted in Engine room & size 2 - 3  
 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 None  
 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 None  
 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 Hot suction How are they protected Wood casing  
 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  
 Dates of examination of completion of fitting of Sea Connections Fitted at Dublin Screw shaft and Propeller U  
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door No tunnel

**BOILERS, &c.**—(Letter for record \_\_\_\_\_) Manufacturers of Steel \_\_\_\_\_  
 Total Heating Surface of Boilers \_\_\_\_\_ Is Forced Draft fitted No No. and Description of Boilers one, Single End Cyl.  
 Working Pressure 140 lbs Tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_  
 Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler \_\_\_\_\_ No. and Description of Safety Valves to each boiler Two - Rocket Springs of each valve 9.62 sq Pressure to which they are adjusted 145 lbs Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork about 7 ft Mean dia. of boilers \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_  
 Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are the shell plates welded or flanged \_\_\_\_\_ Descrip. of riveting: cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_  
 Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_  
 Per centages of strength of longitudinal joint \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Size of manhole in shell \_\_\_\_\_  
 Size of compensating ring \_\_\_\_\_ No. and Description of Furnaces in each boiler \_\_\_\_\_ Material \_\_\_\_\_ Outside diameter \_\_\_\_\_  
 Length of plain part \_\_\_\_\_ Thickness of plates \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ No. of strengthening rings \_\_\_\_\_  
 Working pressure of furnace by the rules \_\_\_\_\_ Combustion chamber plates: Material \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_  
 Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_  
 Material of stays \_\_\_\_\_ Diameter at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates in steam space: \_\_\_\_\_  
 Material \_\_\_\_\_ Thickness \_\_\_\_\_ Pitch of stays \_\_\_\_\_ How are stays secured \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_  
 Diameter at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of Front plates at bottom \_\_\_\_\_  
 Thickness \_\_\_\_\_ Material of Lower back plate \_\_\_\_\_ Thickness \_\_\_\_\_ Greatest pitch of stays \_\_\_\_\_ Working pressure of plate by rules \_\_\_\_\_  
 Diameter of tubes \_\_\_\_\_ Pitch of tubes \_\_\_\_\_ Material of tube plates \_\_\_\_\_ Thickness: Front \_\_\_\_\_ Back \_\_\_\_\_ Mean pitch of stays \_\_\_\_\_  
 Pitch across wide water spaces \_\_\_\_\_ Working pressures by rules \_\_\_\_\_ Girders to Chamber tops: Material \_\_\_\_\_ Depth and \_\_\_\_\_  
 thickness of girder at centre \_\_\_\_\_ Length as per rule \_\_\_\_\_ Distance apart \_\_\_\_\_ Number and pitch of stays in each \_\_\_\_\_  
 Working pressure by rules \_\_\_\_\_ Superheater or Steam chest; how connected to boiler \_\_\_\_\_ Can the superheater be shut off and the boiler worked \_\_\_\_\_  
 separately \_\_\_\_\_ Diameter \_\_\_\_\_ Length \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet \_\_\_\_\_  
 holes \_\_\_\_\_ 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 \_\_\_\_\_

