

## REPORT ON MACHINERY.

Port of NEWCASTLE

Received at London Office

FRI. JAN 26 1900

No. in Survey held at NEWCASTLE  
Reg. Book.

Date, first Survey Dec 5/98 Last Survey Jan 18 1900

(Number of Visits 444)

on the

s/s ROSALIE

Gross 4303  
Net 2821  
Tons

When built 1-1900

Master J. Pengelly Built at Newcastle

By whom built Northumberland S.S. Co. Ltd

Engines made at Newcastle

By whom made The Wallsend Shipway &amp; Co. Ltd

when made 1-1900

Boilers made at Newcastle

By whom made The Wallsend Shipway &amp; Co. Ltd.

when made 1-1900

Registered Horse Power

Owners J. Gory &amp; Sons Ltd

Port belonging to Cardiff

Nom. Hors. Power as per Section 28 308 320

Is Refrigerating Machinery fitted No

Is Electric Light fitted No

## ENGINES, &amp;c.—Description of Engines

Triple

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 23-38 1/2-65 Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft as per rule 12-6 as fitted 13 1/2 Lgh. of stern bush 7-0 3/8

Dia. of Tunnel shaft as per rule 12 Dia. of Crank shaft journals as per rule 12 1/2 Dia. of Crank pin 13 Size of Crank webs 19 1/2 x 8 1/2 Dia. of thrust shaft under collars 12 1/2 Dia. of screw 17-0 Pitch of screw 18-6 No. of blades 4 State whether moveable no Total surface 90 1/2

No. of Feed pumps 2 Diameter of ditto 3 1/2 Stroke 25 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 Stroke 25 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 duplex Sizes of Pumps 6 x 8 1/2 x 6, 6 x 4 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room five 3 1/2 In Holds, &amp;c. Fore hold two 3 1/2, Main hold two 3 1/2

After main hold two 3 1/2, After hold well one 3 1/2, Tunnel well one 2 1/2

No. of bilge injections 1 sizes 6 1/2 Connected to condenser, or to circulating pump pump Is a separate donkey suction fitted in Engine room &amp; size yes 3 1/2

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 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 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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock New Vessel Is the screw shaft tunnel watertight yes

Is it fitted with a watertight door yes worked from upper platform

## BOILERS, &amp;c.—

(Letter for record S)

Total Heating Surface of Boilers 4970 1/2

Is forced draft fitted No

No. and Description of Boilers 2 Mult. Single ended Working Pressure 180% Tested by hydraulic pressure to 360%

Date of test 22-2-99 Can each boiler be worked separately yes Area of fire grate in each boiler 60 1/2 No. and Description of safety valves to

each boiler 2 direct spring Area of each valve 7-06 Pressure to which they are adjusted 180% Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers 16-0 1/2 Mean dia. of boilers 16-0 Length 10-6 Material of shell plates Steel

Thickness 1/4 Range of tensile strength 29-32 Are they welded or flanged flanged Descrip. of riveting: cir. seams D &amp; T TR long. seams DBS, T R

Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 9 1/2 Top of plates on width of butt straps 19 1/2

Per centages of strength of longitudinal joint rivets 88 plate 88-6 Working pressure of shell by rules 181% Size of manhole in shell 16 x 12

Size of compensating ring 6 1/2 x 1 1/2 No. and Description of Furnaces in each boiler 3 Deightons Material Steel Outside diameter 51

Length of plain part top 5 bottom 8 Thickness of plates crown 5 bottom 8 Description of longitudinal joint welded No. of strengthening rings none

Working pressure of furnace by the rules 19 1/2 Combustion chamber plates: Material Steel Thickness: Sides 1/2 Back 1/2 Top 1/2 Bottom 3/4

Pitch of stays to ditto: Sides 9 1/2 x 9 1/4 Back 9 1/4 x 9 1/4 Top 9 1/4 x 9 1/4 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 185%

Material of stays Steel Diameter at smallest part 1 1/8 Area supported by each stay 87 1/2 Working pressure by rules 185% End plates in steam space:

Material Steel Thickness 1 1/8 Pitch of stays 16 x 19 How are stays secured D N &amp; W Working pressure by rules 182% Material of stays Steel

Diameter at smallest part 2 1/8 Area supported by each stay 304 1/2 Working pressure by rules 200% Material of Front plates at bottom Steel

Thickness 1 1/8 Material of Lower back plate Steel Thickness 1 1/8 Greatest pitch of stays 12 3/4 Working pressure of plate by rules 18 1/2

Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 x 4 3/8 Material of tube plates Steel Thickness: Front 1 1/8 Back 3/4 Mean pitch of stays 8 1/2

Pitch across wide water spaces 13 3/4 Working pressures by rules 240% Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 8 1/2 x 8 1/2 2 plates Length as per rule 30 1/2 Distance apart 9 1/4 Number and pitch of Stays in each 2 - 9 1/4

Working pressure by rules 20 1/2 Superheater or Steam chest; how connected to boiler None 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



SPARE GEAR. State the articles supplied:— One set of coupling bolts, two top two bottom end bolts, two main bearing bolts, one set of feed cone set of bilge pump valves one set of piston springs, a quantity of assorted bolts species of iron and one propeller.

*The foregoing is a correct description of the above described machine.*

*Manufacturer.*

Is the approped plan of main boiler forwarded herewith yes  
 " " " donkey " " " No

The machinery of this vessel has been constructed & fitted on board under Special Survey the workmanship is sound & good throughout. The main steam pipes have been tested by hydraulic test to twice the working pressure. The engines & boilers have been tried under steam & found to work well, which in my opinion renders the vessel eligible for the record of **+L.M.C 1-1900** in the Register Book.

It is submitted that  
this vessel is eligible for  
THE RECORD. + L.M.C. 1-00.

<i>Rs.</i>	<i>Amount</i>
<u>26.1.00</u>	<u>26.1.00</u>

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

TUES. 30 JAN 1900

+ LMC 1.00

to *Lloyd's Register*

A large, stylized, light-colored 'LR' logo is centered on the page. The letters are thick and blocky, with the 'L' and 'R' joined together. The background is a textured, light blue-grey color.

*British & Foreign*

Lloyd's Register  
Foundation