

# REPORT ON MACHINERY.

(Received in London Office. 16/12/81)

3566  
 in Survey held at Glasgow & Paisley Date, first Survey 31<sup>st</sup> March Last Survey 13<sup>th</sup> Feb<sup>r</sup> 1881  
 Book. G. S. Rivoglio Tons 468.20  
 on the G. S. Rivoglio Tons 295.30  
 Master J. Rosasco Built at Paisley When built 1881  
 Engines made at Glasgow By whom made Hutton & Corbett when made 1881  
 Boilers made at do By whom made do when made 1881  
 Registered Horse Power 40 Owners C. Raggio Port belonging to Genoa

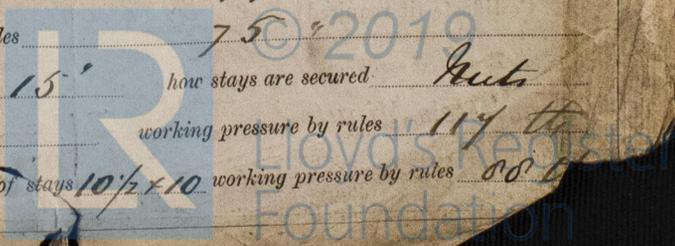
## ENGINES, &c.—

Description of Engines Inverted Compound Surface Condensing  
 Diameter of Cylinders 20" + 38" Length of Stroke 30" No. of Rev. per minute 80 Point of Cut off, High Pressure 5/8" Low Pressure 1/4"  
 Diameter of Screw shaft 7 1/4" Diameter of Tunnel shaft 6 1/2" Diameter of Crank shaft journals 7 1/4" Diameter of Crank pin 7 1/4" size of Crank webs 10" x 6 1/2"  
 Diameter of screw 9" x 6" Pitch of screw 12" = 0 No. of blades 11 state whether moveable yes total surface 26 sq. feet  
 No. of Feed pumps one diameter of ditto 3 1/4" Stroke 14" Can one be overhauled while the other is at work no  
 No. of Bilge pumps one diameter of ditto 3 1/4" Stroke 14" Can one be overhauled while the other is at work no  
 Where do they pump from Bilges of Engine Room and All Compart<sup>ts</sup> of Vessel  
 No. of Donkey Engines one Size of Pumps 3 3/4" x 8" Where do they pump from Sea. Tanks. Bilges of Engine Room. All Compartments of Vessel & Condenser  
 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 2 1/2" dia Are they connected to condenser, or to circulating pump Circulating  
 How are the pumps worked by levers attached to crossheads of aft engine  
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Stop Valves & 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 no  
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times yes except in holds when loaded  
 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 not been dry dock  
 Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from top Platforms of Engines

## BOILERS, &c.—

Number of Boilers one Description Cylindrical & Multitubular  
 Working Pressure 45 lbs Tested by hydraulic pressure to 150 Date of test Mar 16<sup>th</sup> 1881  
 Description of superheating apparatus or steam chest Horizontal none  
 Can the superheater be shut off and the boiler worked separately No superheater  
 of square feet of fire grate surface in each boiler 33 sq. feet Description of safety valves Direct Spring  
 to each boiler two area of each valve 0.3 in Are they fitted with easing gear yes  
 No. of safety valves to superheater no area of each valve no are they fitted with easing gear no  
 Smallest distance between boilers and bunkers or woodwork 9 inches  
 Diameter of boilers 11:0" Length of boilers 10:0" description of riveting of shell long. seams Sub Lap circum. seams sub Lap  
 Thickness of shell plates 25/32" diameter of rivet holes 1 3/16" whether punched or drilled no pitch of rivets 4 1/4"  
 Lap of plating 7 7/8" per centage of strength of longitudinal joint 76 Pate, 89 in working pressure of shell by rules 46 lbs  
 Size of manholes in shell 15" x 12 1/2" size of compensating rings Angle Iron 3" x 3" x 1/2"  
 No. of Furnaces in each boiler two outside diameter 3' 1/4" length, top 7-0" bottom 8' 6"  
 Thickness of plates 1/2" description of joint Sub Butt if rings are fitted Bottom greatest length between rings 6' 0"  
 Working pressure of furnace by the rules 77 lbs  
 Combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"  
 Pitch of stays to ditto sides 10" x 10" back 10" x 10" top 10" x 10"  
 If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 77 lbs  
 Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 75 lbs  
 End plates in steam space, thickness 1/16" pitch of stays to ditto 15" x 15" how stays are secured Nuts  
 Working pressure by rules 45 lbs diameter of stays at smallest part 2" working pressure by rules 117 lbs  
 Front plates at bottom, thickness 9/16" Back plates, thickness 9/16" greatest pitch of stays 10 1/2" x 10" working pressure by rules 88 lbs

GLS 146-0195



Diameter of tubes  $3\frac{1}{2}$ " pitch of tubes  $4\frac{3}{4} \times 4\frac{3}{4}$ " thickness of tube plates, front  $\frac{1}{16}$ " back  $\frac{3}{8}$ "  
 How stayed *Side stay* pitch of stays  $14\frac{1}{4} \times 9\frac{1}{2}$ " width of water spaces  $6$ "  
 Diameter of ~~Superheater~~ Steam chest  $2' \cdot 9"$  length  $5' \cdot 6"$   
 Thickness of plates  $\frac{1}{2}$ " description of longitudinal joint *Lap Single* diameter of rivet holes  $\frac{7}{8}$ " pitch of rivets  $2\frac{1}{4}$ "  
 Working pressure of shell by rules  $124\text{ lb}$  Diameter of flue  $\text{---}$  thickness of plates  $\text{---}$   
 If stiffened with rings  $\text{---}$  distance between rings  $\text{---}$  Working pressure by rules  $\text{---}$   
 End plates of ~~superheater~~ or steam chest; thickness  $\frac{1}{16}$ " How stayed *one round stay 2" dia*  
 Superheater or steam chest; how connected to boiler *by flue*

**DONKEY BOILER—** Description *Circular Vertical Two Water Tubes in Fore Mast*  
 Made at *Glasgow* By whom made *Hutton & Corbell* when made *Tested 17. 11. 81*  
 Where fixed *On Deck* working pressure  $65\text{ lb}$  Tested by hydraulic pressure to  $100\text{ lb}$  No. of Certificate  $641$   
 Fire grate area  $11 \cdot 59\text{ sq ft}$  Description of safety valves *dead spring* No. of safety valves *one* area of each  $7 \cdot 59\text{ sq in}$   
 If fitted with casing gear *yes* If steam from main boilers can enter the donkey boiler *no*  
 Diameter of donkey boiler  $4' \cdot 3"$  length  $8' \cdot 0"$  description of riveting *Lap Single*  
 thickness of shell plates  $\frac{3}{8}$ " diameter of rivet holes  $\frac{13}{16}$ " whether punched or drilled *punched*  
 pitch of rivets  $2\frac{1}{8}$ " lap of plating  $3"$  per centage of strength of joint  $61$   
 thickness of crown plates  $\frac{7}{16}$ " stayed by *Six round stays 1\frac{3}{4}" dia*  
 Diameter of furnace, top  $3' \cdot 4\frac{1}{4}"$  bottom  $3' \cdot 9\frac{3}{4}"$  length of furnace  $4' \cdot 3"$   
 thickness of plates  $\frac{3}{8}$ " description of joint *Lap Single*  
 thickness of furnace crown plates  $\frac{7}{16}$ " stayed by *Six round stays 1\frac{3}{4}" dia*  
 Working pressure of shell by rules  $69\text{ lb}$  working pressure of furnace by rules  $44\text{ lb}$   
 diameter of uptake  $10"$  thickness of plates  $\frac{3}{8}$ " thickness of water tubes  $\frac{3}{8}$ "

The foregoing is a correct description,  
*Wm Herbert* Manufacturer.

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

Machinery & Boilers constructed under special  
 survey. Workmanship and Material of good  
 quality. Tried under steam and found  
 satisfactory. and in our opinion they are  
 eligible to be classed **Lloyds, M.C-12-81**

This submitted that this  
 vessel is eligible to have  
 the notification of Lloyd's M.C  
 recorded *JM* 16/12/81

*J.M. Chagnon & Andrew B. Thomson*  
 Engineer Surveyors to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee  $\pounds 2 : 0 : 0$  received by me,  
 Special ..  $\pounds 10 : 10 : 0$   
 Certificate (if required) ..  $\pounds 0 : 0 : 0$  *14 Dec 1881*  
 To be sent as per margin.  
 (Travelling Expenses, if any,  $\pounds 1/11 - 5/12 : 10 : 0$ )

Committee's Minute Friday, December, 10th. 18 81

*Lloyd's*

Lloyd's Register  
 Foundation