

# REPORT ON MACHINERY.

No. 5424

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No. in Survey held at Paisley & Glasgow Date, first Survey 21<sup>st</sup> January Last Survey 2<sup>nd</sup> July 1881  
 Reg. Book. 199-54

on the S S "Fieramosca" Tons 197-33

Master Cocurullo Built at Paisley When built 1881

Engines made at Paisley By whom made Hanna Donald & Wilson when made 1881

Boilers made at Glasgow By whom made Manist & Graham when made 1881

Registered Horse Power 50 Owners Cocurullo Port belonging to Castellamare

**ENGINES, &c.—**

Description of Engines Compound, Inverted, Direct acting

Diameter of Cylinders 17" & 34" Length of Stroke 18" No. of Rev. per minute Variable Point of Cut off, High Pressure Variable Low Pressure 7/8"

Diameter of Screw shaft 6" Diameter of Tunnel shaft 5 1/2" Diameter of Crank shaft journals 6" Diameter of Crank pin 6" size of Crank webs 4" x 8"\*

Diameter of screw 7 1/2" Pitch of screw 8 1/2" No. of blades 3 state whether moveable yes total surface 15.7 sq ft.

No. of Feed pumps one diameter of ditto 4" Stroke 5" Can one be overhauled while the other is at work yes

No. of Bilge pumps one diameter of ditto 4" Stroke 5" Can one be overhauled while the other is at work yes

Where do they pump from Fore and after Compartment and Engine Room

No. of Donkey Engines one Size of Pumps 1 3/4" dia State Where do they pump from Fore and after Compartment and Engine Room

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 1 1/4 dia Are they connected to condenser, or to circulating pump air pump suction

How are the pumps worked by levers not for injection

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 bilge suction pipe How are they protected cased in with wood

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 before launching & when dry at Paisley

Is the screw shaft tunnel watertight yes and fitted with a sluice door worked from

**BOILERS, &c.—**

Number of Boilers one Description Locomotive type (Steel)

Working Pressure 120 lbs Tested by hydraulic pressure to 240 Date of test 21<sup>st</sup> June 1881

Description of superheating apparatus or steam chest —

Can each boiler be worked separately yes Can the superheater be shut off and the boiler worked separately yes

No. of square feet of fire grate surface in each boiler 42 sq ft Description of safety valves dried spring (Cockburn)

No. to each boiler two area of each valve 11 sq in 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~~ 6"

Diameter of boilers 6 ft Length of boilers 14 1/2 ft description of riveting of shell long. seams butt double circum. seams lap single

Thickness of shell plates 7/8" diameter of rivet holes 1 1/16" whether punched or drilled drilled pitch of rivets 3 1/4" x 2 3/16"

Lap of plating 7 3/4" butt per centage of strength of longitudinal joint 91 working pressure of shell by rules 15 1/2 lbs

Size of manholes in shell 16" x 12" size of compensating rings 6" x 7/8"

No. of Furnaces in each boiler one outside diameter — length, top 7'0" bottom X 6'0"

Thickness of plates 1/2" description of joint lap single if rings are fitted — greatest length between rings —

Working pressure of furnace by the rules Stayed 6 1/2" x 6" & 1 1/8" stays riveted = 150 lbs

Combustion chamber plating, thickness, sides — back — top —

Pitch of stays to ditto — sides — back — top —

If stays are fitted with nuts or riveted heads — working pressure of plating by rules —

Diameter of stays at smallest part 1" working pressure of ditto by rules 120 lbs

End plates in steam space, thickness 1/16" pitch of stays to ditto 12" x 12" how stays are secured nut & washer

Working pressure by rules 120 lbs diameter of stays at smallest part 2" working pressure by rules 130 lbs

Front plates at bottom, thickness 1/16" Back plates, thickness 1/8" greatest pitch of stays 6" x 6" working pressure by rules —



