

REPORT ON MACHINERY.

3899

No. 3899

Port of

Received at London Office 6 SEPT 1888

No. in Survey held at

Netherton & Cardiff Date, first Survey 13th July

Last Survey 30th Aug. 1888

Reg. Book.

187 on the Iron screw Steamer Canton

(Number of Visits 5)

1176
Tons 1826

Master Park

Built at Newcastle By whom built C Mitchell & Co.

When built 1869

Engines made at Newcastle

By whom made Thompson, Boyd & Co.

when made 1869

Boilers made at Newcastle

By whom made Thompson, Boyd & Co.

when made 1878

Registered Horse Power 150

Owners Corfield & Robson

Port belonging to London

ENGINES, &c.—

Description of Engines

Diameter of Cylinders	Length of Stroke	No. of Rev. per minute	Point of Cut off, High Pressure	Low Pressure
Diameter of Screw shaft	Diam. of Tunnel shaft	Diam. of Crank shaft journals	Diam. of Crank pin	size of Crank webs
Diameter of screw	Pitch of screw	No. of blades	state whether moveable	total surface
No. of Feed pumps	diameter of ditto	Stroke	Can one be overhauled while the other is at work	
No. of Bilge pumps	diameter of ditto	Stroke	Can one be overhauled while the other is at work	
Where do they pump from				
No. of Donkey Engines	Size of Pumps	Where do they pump from		
Are all the bilge suction pipes fitted with roses	Are the roses always accessible	Are the sluices on Engine room bulkheads always accessible		
No. of bilge injections and sizes	Are they connected to condenser, or to circulating pump			
Where are the pumps worked				
Are all connections with the sea direct on the skin of the ship	Are they Valves or Cocks			
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates	Are the discharge pipes above or below the deep water line			
Are they each fitted with a discharge valve always accessible on the plating of the vessel	Are the blow off cocks fitted with a spigot and brass covering plate			
What pipes are carried through the bunkers	How are they protected			
Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times				
Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges				
When were stern tube, propeller, screw shaft, and all connections examined in dry dock				
Is the screw shaft tunnel watertight	and fitted with a sluice door	worked from		

VALVES, &c.—

Number of Boilers	Description	Whether Steel or Iron
Working Pressure	Tested by hydraulic pressure to	Date of test
Description of superheating apparatus or steam chest		
Can each boiler be worked separately	Can the superheater be shut off and the boiler worked separately	
Area of square feet of fire grate surface in each boiler	Description of safety valves	No. to each boiler
Area of each valve	Are they fitted with easing gear	No. of safety valves to superheater
Are they fitted with easing gear	Smallest distance between boilers and bunkers or woodwork	
Thickness of boilers	description of riveting of shell long. seams	circum. seams
Diameter of rivet holes	whether punched or drilled	pitch of rivets
Percentage of strength of longitudinal joint	working pressure of shell by rules	size of manholes in shell
No. of compensating rings	No. of Furnaces in each boiler	
Side diameter	length, top	bottom
Thickness of plates	description of joint	
Are rings fitted	if rings are fitted	
Test length between rings	working pressure of furnace by the rules	combustion chamber plating, thickness, sides
back	top	working pressure of plating by
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	working pressure of ditto by rules
end plates in steam space, thickness		
of stays to ditto	how stays are secured	working pressure by rules
diameter of stays at		
smallest part	working pressure by rules	Front plates at bottom, thickness
Back plates, thickness		
Test pitch of stays	working pressure by rules	Diameter of tubes
pitch of tubes	thickness of tube	
plates, front	back	how stayed
pitch of stays	width of water spaces	
Diameter of Superheater or Steam chest	length	thickness of plates
description of longitudinal joint	diam. of rivet holes	
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 4 Galloway tubes*
 Made at *Neltherton* by whom made *A & J Danks* when made *1888* where fixed *in stokehold*
 Working pressure *70 lb* tested by hydraulic pressure to *140 lb* No. of Certificate *7.9* fire grate area *25.22 sq. ft.* description of safety valves *spring loaded* No. of safety valves *2* area of each *7.06 sq. ft.* if fitted with easing gear *yes* if steam from main boilers can enter the donkey boiler *no* diameter of donkey boiler *6'-9"* length *12'-6"* description of riveting *vert. double riv. lap.*
 Thickness of shell plates *1/2"* diameter of rivet holes *3/16"* whether punched or drilled *drilled* pitch of rivets *2 1/2"* lap of plating *4"*
 per centage of strength of joint *67.5* thickness of crown plates *9/16"* stayed by *6 stays* *2"* effective diameter
 Diameter of furnace, top *5'-4"* bottom *6'-0"* length of furnace *7'-6"* thickness of plates *3/32"* description of joint *single riv. lap.*
 Thickness of furnace crown plates *9/16"* stayed by *6 riv. stays 2" eff. dia.* working pressure of shell by rules *70.8 lb*
 Working pressure of furnace by rules *72.9 lb* diameter of uptake *20"* thickness of plates *7/16"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
 on behalf of the Manufacturer.

*Joseph W. Rose Engineering Dept
 West Works, St. Charles*

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

The workmanship and materials are good, and the boiler has been built according to the drawing herewith attached & approved by the committee. The safety valves were seen blowing off at a pressure of 65 lbs per square inch.

*This submitted that this vessel is eligible for a man's certificate
 R.P.
 4/9/88*

The amount of Entry Fee .. £ - : - : - received by me
 Special .. £ - : - : -
 Donkey Boiler Fee .. £ *2* : *2* : *0*
 Certificate (if required) .. £ : : : *18*
 To be sent as per margin.
 (Travelling Expenses, if any, £ *3.15.0*)

James H. Manser
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRIDAY 12 OCT 1888**

Remission as closed

