

## REPORT ON MACHINERY.

THURS. 10 NOV 1892

No. 5394

Port of

Bristol

Received at London Office

18

No. in Survey held at  
Reg. Book.

Date, first Survey

28 May

Last Survey

1891

(Number of Visits)

744 on the

S. S. Olive

Gross 114.20  
Net 10.8

Master Geo. H. Fisher

Built at

Mann

By whom built

Mann Graving Dock &amp; Ship Co. (Ld)

When built 1891

Engines made at

Mann

By whom made

Mann Graving Dock &amp; Ship Co. (Ld)

when made 1891

Boilers made at

Bristol

By whom made

Messrs. G. K. Stothert &amp; Co.

when made 1891

Registered Horse Power

80

Owners

Mann Railway Co.

Port belonging to

Mann Port of Cardiff

## ENGINES, &amp;c.—

Description of Engines

No. of Cylinders

Diam. of Cylinders Length of Stroke 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

How 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

## BOILERS, &amp;c.—

No. of Boilers one Description Cylindrical Multitubular Material Steel throughout Letter (for record) S

Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 3<sup>rd</sup> November 1891

Description of superheating apparatus or steam chest Nil

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

No. of square feet of fire grate surface in each boiler 52.6 Description of safety valves Spring loaded No. to each boiler two

Area of each valve 14.15 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 15 in. Diameter of boilers 10.3

Length of boilers 13.8 description of riveting of shell long. seams double butt strap circum. seams double lap Thickness of shell plates 5/8

Diameter of rivet holes 7/8 whether punched or drilled drilled pitch of rivets 3 5/8 Lap of plating 4 1/2

Percentage of strength of longitudinal joint 75.8 working pressure of shell by rules 96.2 size of manholes in shell 16" x 12"

Size of compensating rings 27" diam. x 5/8 No. of Furnaces in each boiler 4 Description of Furnaces plain

Outside diameter 34 15/16 length 5.3 thickness of plates 7/16 description of joint double butt strap rings are fitted 1/2 rings

Greatest length between rings 4.6 working pressure of furnace by the rules 93.4 combustion chamber plating, thickness, sides 7/16 back top 5/8

Pitch of stays to ditto, sides 8" back top 8" If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 84.2 Diameter of stays at smallest part 1 1/16 working pressure of ditto by rules 111.6 end plates in steam space, thickness 2 3/32

Pitch of stays to ditto 16" x 15" how stays are secured double nut with riveted washer working pressure by rules 10.3 diameter of stays at smallest part 1 7/8 working pressure by rules 9.7 Front plates at bottom, thickness 7/8 Back plates, thickness 5/8

Greatest pitch of stays working pressure by rules Diameter of tubes 3" pitch of tubes 4 1/4 x 4 1/2 thickness of tube plates, front 2 3/32 back 5/8 how stayed stay tube pitch of stays 12 3/4 width of water spaces 6" x 7"

Diameter of Superheater or Steam chest length thickness of plates description of longitudinal joint diam. of rivet holes

Pitch of rivets working pressure of shell by rules diameter of flue thickness of plates If stiffened with rings

Distance 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

Made at \_\_\_\_\_ by whom made \_\_\_\_\_ when made \_\_\_\_\_ where fixed \_\_\_\_\_ No. in \_\_\_\_\_  
 Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ No. of Certificate \_\_\_\_\_ fire grate area \_\_\_\_\_ description of \_\_\_\_\_  
 valves \_\_\_\_\_ No. of safety valves \_\_\_\_\_ area of each \_\_\_\_\_ if fitted with easing gear \_\_\_\_\_ if steam from main boilers \_\_\_\_\_  
 enter the donkey boiler \_\_\_\_\_ diameter of donkey boiler \_\_\_\_\_ length \_\_\_\_\_ description of riveting \_\_\_\_\_  
 Thickness of shell plates \_\_\_\_\_ diameter of rivet holes \_\_\_\_\_ whether punched or drilled \_\_\_\_\_ pitch of rivets \_\_\_\_\_ lap of plating \_\_\_\_\_  
 per centage of strength of joint \_\_\_\_\_ thickness of crown plates \_\_\_\_\_ stayed by \_\_\_\_\_  
 Diameter of furnace, top \_\_\_\_\_ bottom \_\_\_\_\_ length of furnace \_\_\_\_\_ thickness of plates \_\_\_\_\_ description of joint \_\_\_\_\_  
 Thickness of furnace crown plates \_\_\_\_\_ stayed by \_\_\_\_\_ working pressure of shell by rules \_\_\_\_\_  
 Working pressure of furnace by rules \_\_\_\_\_ diameter of uptake \_\_\_\_\_ thickness of plates \_\_\_\_\_ thickness of water tubes \_\_\_\_\_

**SPARE GEAR.** State the articles supplied :—

The foregoing is a correct description,

*E. H. Stothard* Manufacturer.

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

This Steel Boiler has been constructed under Special Survey, the materials used have been tested in accordance with the Rules, the workmanship is good.  
 The Boiler was tested by water to twice its working pressure and proved satisfactory under test.  
 The Safety valves adjusted under steam to a working pressure of 80 lbs per sq. in.

The amount of Entry Fee .. £ : : received by me,  
 Special .. .. £ 4 : 0 : 0  
 Donkey Boiler Fee .. .. £ : :  
 Certificate (if required) .. £ : : 5th October 1892  
 To be sent as per margin.

(Travelling Expenses, if any, £

Committee's Minute

TUES. 13 DEC 1892

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

*Wm. B. Taylor*

Lloyd's Register  
 Foundation