

REPORT ON MACHINERY.

7320

No. 7320

Received at London Office **THURS 25 MARCH 1880**

No. in Survey held at Glasgow Date, first Survey _____ Last Survey 16th Feb 1880

Reg. Book. _____ (Number of Visits _____) Tons 1669

on the Donkey Boiler of Ship Ventura

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made _____ when made _____

Boilers made at _____ By whom made _____ when made _____

Registered Horse Power _____ Owners _____ Port belonging to _____

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 _____

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, &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 _____ area of each valve _____

Are they fitted with easing gear _____ Smallest distance between boilers and bunkers or woodwork _____ Diameter of boilers _____

Thickness of shell plates _____ description of riveting of shell long. seams _____ circum. seams _____

Diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ Lap of plating _____

Percentage of strength of longitudinal joint _____ working pressure of shell by rules _____ size of manholes in shell _____

Size of compensating rings _____ No. of Furnaces in each boiler _____

Outside diameter _____ length, top _____ bottom _____ thickness of plates _____ description of joint _____ if rings are fitted _____

Greatest length between rings _____ working pressure of furnace by the rules _____ 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 _____ working pressure of ditto by rules _____ end plates in steam space, thickness _____

Pitch 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 _____

Greatest 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 _____

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 _____



Form No. 1 for Iron

Sailing Ship "Ventura"

7320 lbs

DONKEY BOILER— Description *Cylindrical, Vertical, 3 Horizontal Water tubes*
 Made at *Stockton* by whom made *Messrs. Riley Bros.* when made *7.1.86* where fixed
 Working pressure *60 lbs.* tested by hydraulic pressure to *120 lbs.* No. of Certificate *1296* fire grate area *8.3 sq ft.* description of safety valves *Direct Spring* No. of safety valves *One* area of each *4 sq in.* if fitted with easing gear *Yes* if steam from main boilers can enter the donkey boiler
 diameter of donkey boiler *42.0* length *10.0* description of riveting *single riv² lap*
 Thickness of shell plates *5/16* diameter of rivet holes *1/16* whether punched or drilled *punched* ^{annealed} pitch of rivets *1 3/4* lap of plating *2 1/4*
 per centage of strength of joint *63* thickness of crown plates *3/8* stayed by *Uptake x 4 vertical stays 1/4 dia*
 Diameter of furnace, top *3.4* bottom *3.5 3/8* length of furnace *4.1* thickness of plates *3/8* description of joint *single riv² lap*
 Thickness of furnace crown plates *3/8* stayed by *Uptake x 4 vertical stays 1/4 dia* working pressure of shell by rules *81 lbs.*
 Working pressure of furnace by rules *73 lbs.* diameter of uptake *9 3/4* thickness of plates *3/8* thickness of water tubes *5/16*

SPARE GEAR. State the articles supplied: *This boiler has been tried under steam and the Safety Valves set to the working pressure of 60 lbs per sq. inch and is with all its connections in good working condition James Morrison*
Stoddart
 The foregoing is a correct description, *Clyde District*
 Manufacturer.

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

The amount of Entry Fee .. £ : received by me,
 Special .. £ :
 Donkey Boiler Fee .. £ :
 Certificate (if required) .. £ : 18
 To be sent as per margin.

(Travelling Expenses, if any, £) Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRIDAY 26 MARCH 1886

