

REPORT ON MACHINERY.

No. 55

No. in Survey held at
Reg. Book.

Flushing

Date, first Survey 30 Oct. 83 Last Survey 24 July 1884

Received at London Office

(Number of Visits 12)

on the Iron Screw Steamer, "Rosalind."

Tons

Master T. Black. Built at Flushing By whom built, Royal Shipbuilding When built, 1884

Engines made at Flushing By whom made, and Engineering Co. when made 7. 1884

Boilers made at A. By whom made, "the Scheldt". when made 7. 1884

Registered Horse Power 90 Owners Coppack Carter & Co. Port belonging to Chester.

ENGINES, &c.—

Description of Engines

Inverted Compound Surface Condensing

Diameter of Cylinders 22" x 41" Length of Stroke 30" No. of Rev. per minute 85 Point of Cut off, High Pressure 60% Low Pressure 55%

Diameter of Screw shaft 8" Diam. of Tunnel shaft 7 1/4" Diam. of Crank shaft journals 8" Diam. of Crank pin 8 1/2" size of Crank webs 10" x 5 1/8"

Diameter of screw 10 feet Pitch of screw 15 feet No. of blades 4 state whether moveable hot total surface 32 sq ft

No. of Feed pumps 2 diameter of ditto 3 1/4" Stroke 12" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 diameter of ditto 3 1/4" Stroke 12" Can one be overhauled while the other is at work yes

Where do they pump from Engine room 3 roses and all compartments of ship.

No. of Donkey Engines 1 1/2 Size of Pumps 3 1/2 x 7" d. blact. 40 ton pumps Where do they pump from Donkey as above and from sea. Pulsometer as above from Ballast tanks and 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 4 1/2" Are they connected to condenser, or to circulating pump to condenser.

How are the pumps worked by levers from L. F. Crosshead.

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 none How are they protected —

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times yes

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 —

Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Engine room platform.

BOILERS, &c.—

Number of Boilers one

Description Cylindrical tubular Whether Steel or Iron Steel.

Working Pressure 95 lbs Tested by hydraulic pressure to 190 lbs Date of test 5.7.84 Cert. No. 44.

Description of superheating apparatus or steam chest Cylindrical horizontal.

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

of square feet of fire grate surface in each boiler 55 sq ft Description of safety valves Adm. patent No. to each boiler two

of each valve 14. 19 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 10" Diameter of boilers 13' 1 1/8"

Length of boilers 9' 4 1/4" description of riveting of shell long. seams quadruple lap circum. seams double lap Thickness of shell plates 3/16"

Diameter of rivet holes 1 1/8" whether punched or drilled drilled pitch of rivets 5 1/8" Lap of plating 6 1/2"

Percentage of strength of longitudinal joint 79 1/2% working pressure of shell by rules 98 lbs size of manholes in shell 15" x 12"

Size of compensating rings 6" x 1 3/16" double riveted No. of Furnaces in each boiler three

Outside diameter 3' 2" length, top 6' bottom — thickness of plates 1/2" description of joint dbl butt higher rivets rings are fitted —

Greatest length between rings — working pressure of furnace by the rules 98 combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"

Pitch of stays to ditto, sides 7 1/2" x 8" back 7 1/2" x 8" top 7 1/2" x 8" If stays are fitted with nuts or riveted heads riveted heads working pressure of plating by

rules 100 Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 113 end plates in steam space, thickness 3/4"

Pitch of stays to ditto 15" x 15" how stays are secured dbl nut & wash. working pressure by rules 107 lbs diameter of stays at

smallest part 2" working pressure by rules 111 lbs Front plates at bottom, thickness 5/8" Back plates, thickness 5/8"

Greatest pitch of stays 8" x 10" working pressure by rules 100 Diameter of tubes 3 1/4" ext pitch of tubes 4 1/2" thickness of tube

plates, front 3/4" back 3/4" how stayed screw tubes pitch of stays 13 1/2" width of water spaces 1 1/4"

Diameter of Superheater or Steam chest 3' 6 3/4" length 5' 6" thickness of plates 3/8" description of longitudinal joint lap dbl rivdiam. of rivet holes 3/4"

Pitch of rivets 2 3/4" working pressure of shell by rules 130 lbs 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 1/2" how stayed ne 2"

Stay Double nut and washers Superheater or steam chest; how connected to boiler Iron neck.



DONKEY BOILER— Description *Vertical Cylindrical.*
 Made at *Sunderland* by whom made *Welford Bros* when made _____ where fixed *Stokehold*
 Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *741* fire grate area *14 feet* description of safety
 valves *lever & weight* No. of safety valves *two* area of each *3.9 sq* if fitted with easing gear *yes* if steam from main boilers can
 enter the donkey boiler *non return* 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:— *2 Safety valve springs; 2 do for escapes; 1 set of Coupling bolts; 1 N.F. valve spindle; 1 set of Crankpin bushes; 2 Main bearing bolts; 2 Connecting rod top & bottom end bolts & nuts; 2 feed and bilge pump valves a number of assorted bolts & Iron of various sizes.*

The foregoing is a correct description,

ROYAL SHIPBUILDING & ENGINEERING CO. Manufacturer.

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

Mark a Donkey Boiler.

*Nº 741
 Lloyd's Test.
 160 lbs.
 W.A. 27.3.84.*

*The materials used and the work-
 -manship being good. The engines proving
 to work satisfactory under a full head
 of steam renders this vessel eligible in
 my opinion to be recorded in the
 Society's Register book with.
 * L. M. C. 7.84.*

*This subject is that this
 vessel is an old one to have the
 registration + £m 6 7 84
 record do*

The amount of Entry Fee .. £ 1 : : received by me
 Special .. £ 13 : 10 :
 Donkey Boiler Fee .. £ : :
 Certificate (if required) .. £ : 2 : 6 18
 To be sent as per margin.

(Travelling Expenses, if any, £ 5-3-11.)

Committee's Minute

TUESDAY 5 AUGUST 1884

W. F. D. van Allen
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

