

REPORT ON MACHINERY.

47786

Port of London

Received at London Office 18

No.

No. in Survey held at

Date, first Survey

Last Survey

18

Reg. Book.

(Number of Visits)

on the Boilers for P. S. Swift

Tons

Master

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at Leptford

By whom made General St Navigation Co

when made 1887

Registered Horse Power

Owners General St Jan Co

Port belonging to

ENGINES, &c.—

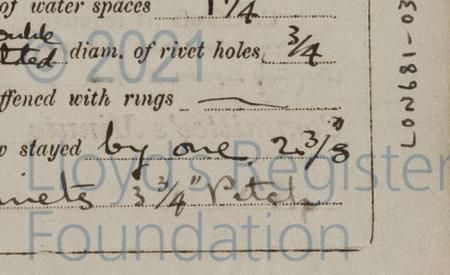
Description of Engines

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 moreable	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	<u>Two</u>	Description	<u>Circular Tubular</u>	Whether Steel or Iron	<u>Iron</u>
Working Pressure	<u>60 lbs</u>	Tested by hydraulic pressure to	<u>120 lbs</u>	Date of test	<u>Sept 24-87</u>
Description of superheating apparatus or steam chest	<u>Ordinary circular longitudinal steam chest</u>				
Can each boiler be worked separately	<u>Yes</u>	Can the superheater be shut off and the boiler worked separately	<u>No Superheater</u>		
No. of square feet of fire grate surface in each boiler	<u>55.75</u>	Description of safety valves	<u>Adam's Spring</u>	No. to each boiler	<u>Two</u>
Area of each valve	<u>12.5664</u>	Are they fitted with easing gear	<u>Yes</u>	No. of safety valves to superheater	area of each valve
Are they fitted with easing gear	<u>Yes</u>	Smallest distance between boilers and bunkers	<u>woodwork 5'-0"</u>	Diameter of boilers	<u>12'-0 1/2"</u>
Length of boilers	<u>9'-6"</u>	description of riveting of shell long. seams	<u>double</u>	circum. seams	<u>double</u>
Diameter of rivet holes	<u>1 1/8"</u>	whether punched or drilled	<u>Punched</u>	pitch of rivets	<u>3 1/2"</u>
Per centage of strength of longitudinal joint	<u>67.9</u>	working pressure of shell by rules	<u>66 lbs</u>	size of manholes in shell	<u>14" x 10" & 8" x 5"</u>
Size of compensating rings	<u>28" x 20"</u>	<u>4 16" x 10"</u>	No. of Furnaces in each boiler	<u>Three</u>	
Outside diameter	<u>3'-0"</u>	length, top	<u>6'-11"</u>	bottom	<u>6'-11"</u>
Greatest length between rings	<u>89 lbs</u>	working pressure of furnace by the rules	<u>89 lbs</u>	combustion chamber plating, thickness, sides	<u>7/16"</u>
Pitch of stays to ditto, sides	<u>8 1/2"</u>	back	<u>8 1/4"</u>	top	<u>3 x 3 1/2"</u>
rules	<u>75 lbs</u>	Diameter of stays at smallest part	<u>1 1/8"</u>	working pressure of ditto by rules	<u>82 lbs</u>
Pitch of stays to ditto	<u>15"</u>	how stays are secured	<u>Nuts & Washers</u>	working pressure by rules	<u>64.5 lbs</u>
smallest part	<u>2" under thread</u>	working pressure by rules	<u>83 lbs</u>	Front plates at bottom, thickness	<u>5/8"</u>
Greatest pitch of stays	<u>15" 16 1/2"</u>	working pressure by rules	<u>83 lbs</u>	Back plates, thickness	<u>5/8"</u>
plates, front	<u>1/16"</u>	back	<u>1/16"</u>	how stayed	<u>St tubes</u>
Diameter of Superheater or Steam chest	<u>2'-9 1/4"</u>	length	<u>9'-0"</u>	thickness of plates	<u>5/8"</u>
Pitch of rivets	<u>2"</u>	working pressure of shell by rules	<u>213 lbs</u>	diameter of flue	<u>3"</u>
Distance between rings	<u>2 3/8"</u>	working pressure by rules	<u>213 lbs</u>	end plates of superheater, or steam chest; thickness	<u>5/8"</u>
Stay with nuts & washers	Superheater or steam chest; how connected to boiler by <u>7/8 Rivets 3 3/4" pitch</u>				

LON 2681-0345



47786 Lon

DONKEY BOILER—

Description

Made at _____ by whom made _____ when made _____ where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ fire grate area _____ description of safety valves _____

No. of safety valves _____ area of each _____ if fitted with easing gear _____ if steam from main boilers can 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 furnace by rules _____ diameter of uptake _____ thickness of plates _____ working pressure of shell by rules _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
R. Gonsyth Manufacturer.

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

The workmanship of these boilers is in my opinion of high class and I was well satisfied with their appearance under a water pressure of fully 120 lbs per sq in. I therefore consider them eligible for classification as +.N.B. 10-87.

Submitted that this
 vessel is eligible to have
 the record + N.B. 87.
 J.A.
 26.11.87

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

J. Johnstone Bourne
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUESDAY 8 NOV 1887

+ N.B. 87 L. 26.11.87

