Rpt. 4. No. 11829

REPORT ON MACHINERY.

Port of Greenock. Received at London Office WED. 8 SEP 1897

No. in Reg. Book. 140 Survey held at Greenock. Date, first Survey 23rd May 1896 Last Survey 26th August 1897. (Number of Visits 128)

on the Screw Steamer "Egypt." Tons Gross 4912 Net 4141

Master R. F. Briscoe. Built at Greenock By whom built Caird & Coy. (Limd) When built 1897.

Engines made at Greenock By whom made Caird & Coy (Limd) when made 1897.

Boilers made at do. By whom made do do when made 1897.

Registered Horse Power 2500 Owners Peninsular & Oriental S.N. Coy. Port belonging to Greenock.

Nom. Horse Power as per Section 28 1355. Is Electric Light fitted yes.

ENGINES, &c.—Description of Engines No. of Cylinders No. of Cranks

Diameter of Cylinders Length of Stroke Revolutions per minute Diameter of Screw shaft as per rule as fitted

Diameter of Tunnel shaft as per rule as fitted Diameter of Crank shaft journals Diameter 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

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Holds, &c.

No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

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 and all boiler mountings accessible at all times

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication 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

Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record S.) Total Heating Surface of Boilers — Is forced draft fitted yes.

No. and Description of Boilers Three Cylindrical Multitubular, single ended. Working Pressure 170 lbs Tested by hydraulic pressure to 340 lbs

Date of test 11.3.97 Can each boiler be worked separately yes Area of fire grate in each boiler 59 ☐ No. and Description of safety valves to each boiler Two direct spring Area of each valve 8.94 ☐" Pressure to which they are adjusted 175 lbs Are they fitted with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean diameter of boilers 15'.3"

Length 11'.6" Material of shell plates Steel Thickness 1 11/32" Description of riveting: circum. seams Lap double riveted long. seams D.B. straps treble.

Diameter of rivet holes in long. seams 1 11/32" Pitch of rivets 8 3/4" x 4 3/8" Lap of plates or width of butt straps 20".

Per centages of strength of longitudinal joint rivets 89. plate 84.6 Working pressure of shell by rules 170 lbs Size of manhole in shell 16" x 12".

Size of compensating ring 30" x 1 5/16" No. and Description of Furnaces in each boiler Three Suspension Material Steel Outside diameter 47".

Length of plain part top — bottom — Thickness of plates crown bottom 14/32" Description of longitudinal joint welded No. of strengthening rings Two 6" x 3" x 1/2" top & bottom

Working pressure of furnace by the rules 200 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" & 5/8" Back 9/16" Top 21/32" Bottom 11/16" sides at bottom riveted.

Pitch of stays to ditto: Sides 7 5/8" x 7 5/8" & 6 7/8" Back 8" x 8" Top 9" x 8" If stays are fitted with nuts or riveted heads nuts except mid. Working pressure by rules 170.8 to 232 lbs

Material of stays Steel Diameter at smallest part 1 3/8" & 1 1/2" Area supported by each stay 58 to 78 ☐" Working pressure by rules 187 to 222 lbs End plates in steam space:

Material Steel Thickness 1" riveted Pitch of stays 17 1/2" x 16 1/2" & 16" washers 11 3/4" x 1" How are stays secured double nuts Working pressure by rules 184 lbs Material of stays Steel

Diameter at smallest part 2 3/4" Area supported by each stay 297 ☐" Working pressure by rules 183 lbs Material of Front plates at bottom Steel

Thickness 13/16" Material of Lower back plate Steel Thickness 13/16" Greatest pitch of stays 11 1/2" Working pressure of plate by rules 172 lbs

Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" x 3 3/4" Material of tube plates Steel Thickness: Front 3/4" & 3/4" double Back 3/4" Mean pitch of stays 7 1/2"

Pitch across wide water spaces 14" Working pressures by rules 231 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9" x 3/4" double Length as per rule 31 1/2" Distance apart 9" & 8 1/2" Number and pitch of Stays in each Three 8"

Working pressure by rules 180 lbs Superheater or Steam chest; how connected to boiler — Can the superheater be shut off and the boiler worked separately — Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes — Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —

If stiffened with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

If not, state whether, and when, one will be sent? Yes

a Report also sent on the Hull of the Ship? Yes

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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 Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler Diameter of donkey boiler Length Material of shell plates Thickness

Description of riveting long. seams Diameter of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Plates Thickness of shell crown plates Radius of do. No. of Stays to do.

Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace 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 uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,

FOR CAIRD AND COMPANY, LIMITED.

Manufacturer.

SECRETARY

Dates of Survey while building	
During progress of work in shops	
During erection on board vessel	
Total No. of visits	

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

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee..	£	:	:	When applied for,
Special	£	:	:	.....18.....
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	:	:	.....18.....

Committee's Minute FRI. 10 SEP 1897

Assigned

A. B. Heron.

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

Greenock District.

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