

REPORT ON MACHINERY.

3000

No. 3000

Received at London Office: 9 NOV 1883

No. in Survey held at Belfast Date, first Survey 21st March Last Survey 4th Nov 1883

Reg. Book. on the "S.S. Jane Clark" (Number of Visits 15) Tons 532.4

Master Christolun Built at Belfast By whom built McKuan, Clark & Co. When built 1883

Engines made at Belfast By whom made Nick-Cotes & Co. Jun^r when made 1883

Boilers made at " By whom made " when made 1883

Registered Horse Power 96 Owners Clark and Service Port belonging to Glasgow

ENGINES, &c.—

Description of Engines Compound, Surface Condensing

Diameter of Cylinders 24 & 48 Length of Stroke 36 No. of Rev. per minute 65 & 70 Point of Cut off, High Pressure 1/2 T. Low Pressure 1/2 T.

Diameter of Screw shaft 9" Diam. of Tunnel shaft 8 1/4 Diam. of Crank shaft journals 9" Diam. of Crank pin 9" size of Crank webs 11 1/2 x 7

Diameter of screw 12-0 Pitch of screw 16-0 No. of blades 4 state whether moveable yes total surface 42 sq

No. of Feed pumps Two diameter of ditto 3" Stroke 18" Can one be overhauled while the other is at work yes

No. of Bilge pumps Two diameter of ditto 3" Stroke 18" Can one be overhauled while the other is at work yes

Where do they pump from engine room, after well and fore hold

No. of Donkey Engines Two Darling Size of Pumps Feed, 3 1/2 in x 9 stroke Ballast, 7 1/2 in x 9 stroke Where do they pump from Small pump from sea,

fore well, engine room, after well & fore hold, large pump from ballast tanks & engine room.

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 dia Are they connected to condenser, or to circulating pump to circulating pump

How are the pumps worked by levers from piston rod crossheads of both engines.

Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both valves & cocks.

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 before launching.

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

BOILERS, &c.—

Number of Boilers One Description Cylindrical, Multi-tubular Whether Steel or Iron Steel

Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 9th/10/83.

Description of superheating apparatus or steam chest none fitted.

Can each boiler be worked separately — Can the superheater be shut off and the boiler worked separately no superheater.

No. of square feet of fire grate surface in each boiler 57 Description of safety valves Spring No. to each boiler Two

Area of each valve 14.19 sq 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 9" Diameter of boilers 44-0

Length of boilers 10-3 description of riveting of shell long. seams DRB Staps, DRiv^d circum. seams Lap, DRiv^d Thickness of shell plates 13/16

Diameter of rivet holes 1/16 whether punched or drilled drilled pitch of rivets 4/4 Lap of plating Buttstaps 15 1/2 wide

Per centage of strength of longitudinal joint 75 working pressure of shell by rules 94.3 lb size of manholes in shell 17 x 13

Size of compensating rings 8 x 13/16 No. of Furnaces in each boiler Two

Outside diameter 4-6 length, top 6-0 bottom 6-0 thickness of plates 1/2 description of joint Corrugated if rings are fitted —

Greatest length between rings — working pressure of furnace by the rules 111 lb combustion chamber plating, thickness, sides 1/2 back 1/2 top 9/16

Pitch of stays to ditto, sides 9 x 8 1/2 back 9 x 8 1/2 top 9 x 7 3/4 If stays are fitted with nuts or riveted heads nuts working pressure of plating by

rules 95 lb Diameter of stays at smallest part 1.38 (5/16) working pressure of ditto by rules 144 lb end plates in steam space, thickness 1/16

Pitch of stays to ditto 15 x 15 how stays are secured Double nut-and-Riv^d washers working pressure by rules 86 lb diameter of stays at

smallest part 3 1/2 working pressure by rules 131 lb Front plates at bottom, thickness 3/4 Back plates, thickness 3/4

Greatest pitch of stays about 13 working pressure by rules 114 lb Diameter of tubes 3 3/4 pitch of tubes 5 x 5 thickness of tube

plates, front 7/8 back 3/4 how stayed Stay tubes pitch of stays 10 x 10 width of water spaces 1/4

Diameter of Superheater or Steam chest None 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 —

Lloyd's Register Foundation

DONKEY BOILER— Description *Cylindrical Vertical, with Furnace.*
 Made at *Belfast* by whom made *Victor Coates & Co. Ltd* when made *23/11/83* where fixed *St. Raloch*
 Working pressure *80 lb* tested by hydraulic pressure to *160 lb* No. of Certificate *55-* fire grate area *12.56 sq* desc. *afet*
 valves *Spring* No. of safety valves *One* area of each *11.01 sq* if fitted with easing gear *yes* if steam from *ers*
 enter the donkey boiler *no* diameter of donkey boiler *5-0* length *12-0* description of riveting *long seams, 6 rivets*
 Thickness of shell plates *7/16* diameter of rivet holes *3/16* whether punched or drilled *drilled* pitch of rivets *2 3/16* lap of plating *4*
 per centage of strength of joint *65.9* thickness of crown plates *9/16* stayed by *8 stays, each 2" effective diam.*
 Diameter of furnace, top *46"* bottom *53.8"* length of furnace *5-0* thickness of plates *7/32* description of joint *lap, single rivet*
 Thickness of furnace crown plates *9/16* stayed *as shell crown* working pressure of shell by rules *96 lb*
 Working pressure of furnace by rules *85 lb* diameter of uptake *mean 13"* thickness of plates *1/2* thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:—*Two connecting rods top and bottom and bolts and nuts, two main bearing bolts, one set-screwing bolt, one set-feed & bilge pump valves, a quantity of assorted bolts and nuts, pins of various sizes, two spare blades for propeller, spare cut-off valves for air pump, heads for cap & pump covers & piston rod & valve spindle etc.*

The foregoing is a correct description,

FOR VICTOR COATES & CO LIMITED

Victor Coates

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

*Material and workmanship good and satisfactory.
 The Machinery and Boilers of this vessel are in good order and safe working condition and, in my opinion, eligible to have the certification of Lloyd's Register of Shipping.*

*It is submitted that this vessel is eligible to have the certification of Lloyd's Register of Shipping.
 M 19/11/83*

The amount of Entry Fee .. £ 1 : : : received by me,
 Special £ 14 : 0 : :
 Donkey Boiler Fee £ - : : :
 Certificate (if required) .. *Gratis* : 14.11.1883
 To be sent as per margin.
 (Travelling Expenses, if any, £ 8 - 8 - 0)

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

Committee's Minute TUESDAY 27 NOV 1883

