

REPORT ON MACHINERY.

No. 3047 (Bel.)

Received at London Office 18

No. in Survey held at Glasgow & Belfast

Date, first Survey, 5th Oct / 83 Last Survey 7th May 1884

Reg. Book.

(Number of Visits 33)

Tons 233.15

on the

S. S. Corra Linn.

Tons 526.61

Master A. G. Walker Built at Belfast

By whom built Horkman, Clark & Co

When built 1884

Engines made at Glasgow

By whom made William Kemp

when made 1884

Boilers made at "

By whom made Anderson & Ryall

when made 1884

Registered Horse Power 96

Owners J. D. A. Wyllie

Port belonging to Glasgow

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting

Diameter of Cylinders 24" x 48" Length of Stroke 36" No. of Rev. per minute 75 Point of Cut off, High Pressure Var Low Pressure

Diameter of Screw shaft 8 1/2" Diam. of Tunnel shaft 8 1/4" Diam. of Crank shaft journals 9" Diam. of Crank pin 9" size of Crank webs 11 x 5 1/2"

Diameter of screw 11-6" Pitch of screw 15-6" No. of blades 4 state whether moveable yes total surface 36 sq. ft.

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 All compartments

No. of Donkey Engines Two Size of Pumps 3" dia x 8" stroke 6" dia x 10" stroke Where do they pump from Hotwell, Sea,

Tank and Bilges.

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 3" Are they connected to condenser, or to circulating pump Cir pump.

How are the pumps worked by Levers.

Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Bolt Valves and 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 For bilge & tank pipes How are they protected wood flooring

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 etc

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

BOILERS, &c.—

Number of Boilers One Description Cylindrical. Mult^l Whether Steel or Iron Steel

Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test January 15th 1884

Description of superheating apparatus or steam chest None

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

No. of square feet of fire grate surface in each boiler 48 sq. ft. Description of safety valves direct spring No. to each boiler Two

Area of each valve 12.5" 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 15" Diameter of boilers 14-0"

Length of boilers 10-3" description of riveting of shell long. seams Butt double circum. seams Lap double Thickness of shell plates 3/4"

Diameter of rivet holes 1" whether punched or drilled Drilled pitch of rivets 4" Lap of plating 13" Butt strap.

Per centage of strength of longitudinal joint 75 working pressure of shell by rules 83.7 lbs size of manholes in shell 16 x 12

Size of compensating rings Double riveted ring No. of Furnaces in each boiler Two

Outside diameter 4-3" length, top 6-6" bottom 9-6" thickness of plates 7/16" description of joint Welded if rings are fitted arranged

Greatest length between rings — working pressure of furnace by the rules 98 lbs combustion chamber plating, thickness, sides 15/32" back 15/32" top 1/2"

Pitch of stays to ditto, sides 8 1/2 x 8 1/2" back 8 1/2 x 8 1/2" top 9 x 9 1/2" If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 85 lbs

Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 100 lbs end plates in steam space, thickness 3/4"

Pitch of stays to ditto 15 1/2 x 15 1/2" how stays are secured Nuts working pressure by rules 84 lbs diameter of stays at smallest part 2 1/4"

working pressure by rules 100 lbs Front plates at bottom, thickness 11/16" Back plates, thickness 11/16"

Greatest pitch of stays 13 1/2 x 8 1/2" working pressure by rules 80 lbs Diameter of tubes 3 3/4" pitch of tubes 5 x 5" thickness of tube plates, front 3/4" back 3/4"

how stayed Tubes pitch of stays 17 1/2 x 10" width of water spaces 8"

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

Copy
DONKEY BOILER— Description *Vertical*
Made at *Gateshead* by whom made *Clark Chapman & Co* when made *1884* where fixed *Stokehold*
Working pressure *60 lbs* tested by hydraulic pressure to *120 lbs* No. of Certificate *1591* fire grate area *12.5 sq. ft.* description of safety
valves *Direct Spring* No. of safety valves *One* area of each *4"* if fitted with easing gear *Yes* if steam from main boilers can
enter the donkey boiler *No* diameter of donkey boiler *5'-0"* length *10'-0"* description of riveting *D. Lap.*
Thickness of shell plates *3/8"* diameter of rivet holes *3/4"* whether punched or drilled *Sp.* pitch of rivets *2 7/8"* lap of plating *3 3/4"*
per centage of strength of joint *61%* thickness of crown plates *7/16"* stayed by *5 stays 1 1/2" diam*
Diameter of furnace, top *3'-9"* bottom *4'-3"* length of furnace *4'-6"* thickness of plates *7/16"* description of joint *Single Lap*
Thickness of furnace crown plates *7/16"* stayed by *Same as Crown* working pressure of shell by rules *76 lbs*
Working pressure of furnace by rules *69 lbs* diameter of uptake *10"* thickness of plates *7/16"* thickness of water tubes *3/8"*
(Signed) *John Brockat*

SPARE GEAR. State the articles supplied:— *Top and Bottom End Bolts. Main Bearing
Bolts. Coupling Bolts. Feed and Bilge Pump Valves.
Iron, Bolts & Nuts of various sizes assorted*

The foregoing is a correct description,

Manufacturer.

J. K. Smith

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

*The above mentioned Engines and Boilers have been
built under Special Survey and are now completed
onboard in a satisfactory manner. The Machinery
is now in my opinion in a safe and good
working condition and eligible to be noted in
The Society's Register Book: *L.M.C. 5.84.*

*Tunnel and propeller shafting exam^d and finished at Engineers on
13/5/84*

*This submitted that this
vessel is eligible to have
the notation
+ L.M.C. 5.84 recorded*

The amount of Entry Fee £ : : received by me, *Wm*
Special .. £ *14* : :
Donkey Boiler Fee .. £ : :
Certificate (if required) .. £ : : *18/6*
To be sent as per margin.

(Travelling Expenses, if any, £/- 1-0 20/- permitted to Belfast
15-0 - for Glasgow.)

Committee's Minute

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

Glasgow.

Lloyd's Register
Foundation