

REPORT ON MACHINERY

(Received in London Office 13/11/88)

No. 27268

No. of Survey held at
Reg. Book

Preston

Date, first Survey 19th April

Last Survey 19th October 1880

on the Steam S.S. "Bebington"

Tons 139.90

Master not appointed

Built at

Preston

When built

1880

Engines made at

Preston

By whom made H. Allsup Sons when made 1880

Boilers made at

- do -

By whom made - do - when made 1880

Registered Horse Power

98

Owners

Birkenhead Corporation

Port belonging to

Liverpool

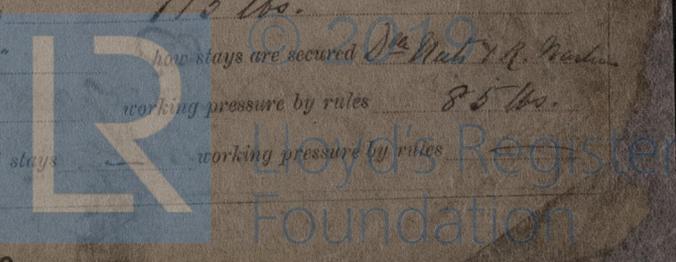
ENGINES, &c.—

Description of Engines 2 Pairs of Compound Mould D. Acting Surface Condensing
 Diameter of Cylinders 19" & 34" Length of Stroke 24" No. of Rev. per minute 90 Point of Cut off, High Pressure 3/4 Low Pressure 1/2
 Diameter of Screw shaft 6 1/2 Diameter of Tunnel shaft 6 Diameter of Crank shaft journals 7 Diameter of Crank pin 7 size of Crank webs 4 1/2" x 9 1/2"
 Diameter of screw 7.4 Pitch of screw 14.6 No. of blades 4 state whether moveable No total surface 15.6 in each pair
 No. of Feed pumps 1 to each pair of engines diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 to each pair of engines diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work Yes
 Where do they pump from Each compartment
 No. of Donkey Engines 1 - 8" Steam off Size of Pumps 4" D.A. Where do they pump from Each compartment & sea to boiler deck and overboard

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 2" dia Are they connected to condenser, or to circulating pump Circulating pump
 How are the pumps worked Lever and links
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Cocks and chests
 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 Not any 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 at this time
 Is the screw shaft tunnel watertight no tunnel and fitted with a sluice door — worked from —

BOILERS, &c.—

Number of Boilers One Description Cyl. Ret. Sub. fired from both ends
 Working Pressure 70 lbs Tested by hydraulic pressure to 140 Date of test 31st August 1880
 Description of superheating apparatus or steam chest Cyl. horizontal steam chest
 Can each boiler be worked separately one Can the superheater be shut off and the boiler worked separately No
 Area of square feet of fire grate surface in each boiler 56.8 Description of safety valves Spring loaded
 No. of safety valves to superheater — area of each valve — Are they fitted with casing gear Yes
 Minimum distance between boilers and bunkers 19 inches
 Diameter of boilers 10' 4" Length of boilers 16' 0" description of riveting of shell long. seams Double Butt Str. D.R. circum. seams D. Rivet laps
 Thickness of shell plates 3/4" diameter of rivet holes 3/4" whether punched or drilled punched pitch of rivets 3 1/2"
 Thickness of plating 10 1/4" per centage of strength of longitudinal joint 75 working pressure of shell by rules 81 lbs.
 Diameter of manholes in shell 16" x 12" size of compensating rings 6" x 7 1/2"
 No. of Furnaces in each boiler 4 outside diameter 3' 0 1/2" length, top 6' 0" bottom —
 Thickness of plates 7/16" description of joint Laps if rings are fitted No greatest length between rings —
 Working pressure of furnace by the rules 81 lbs.
 Combustion chamber plating, thickness, sides 7/16" back 1/2" top 7/16"
 Pitch of stays to ditto 8" x 8" sides 8" x 8" back — top 8" x 8"
 If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 84 lbs.
 Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 115 lbs.
 End plates in steam space, thickness 5/8" pitch of stays to ditto 16" x 15 1/2" how stays are secured Double Nut & Washer
 Working pressure by rules 62 lbs. diameter of stays at smallest part 2 1/2" working pressure by rules 85 lbs.
 Front plates at bottom, thickness 1/2" Back plates, thickness — greatest pitch of stays — working pressure by rules —



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Diameter of tubes $3\frac{1}{2}$ " pitch of tubes $4\frac{3}{4}$ " thickness of tube plates, front $9/16$ " back $9/16$ "
 How stayed stay tubes pitch of stays $1\frac{3}{4}$ " X $9/2$ " width of water spaces $1\frac{1}{4}$ "
 Diameter of Superheater or Steam chest 3.9 length 8.0
 Thickness of plates $3/8$ " description of longitudinal joint lap double diameter of rivet holes $3/4$ " pitch of rivets $2\frac{3}{4}$ "
 Working pressure of shell by rules 93 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 $7/16$ " How stayed are $2\frac{1}{4}$ " stay
 Superheater or steam chest; how connected to boiler By pipe 1.0" dia $3/4$ " thick

DONKEY BOILER— Description the donkey boiler
 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 casing 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 shell by rules working pressure of furnace by rules
 Diameter of uptake thickness of plates thickness of water tubes

The foregoing is a correct description,
 Wm. A. Stoddart & Co. Manufacturers

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery and boiler of this vessel have been constructed under Special Survey, the workmanship is of good quality, The machinery and boiler have been tested under steam and found to work well, and are now in good order and safe working condition and under this vessel eligible, in our opinion, to have the notification **Lloyds M.C. 11.80.** recorded in the Register Book

Has submitted that this vessel is eligible to have the notification recorded in the Register Book
 M 13/11/80

The amount of Entry Fee £ 2 : 0 : 0 received by me, 2 F.L.
 Special £ 14 : 14 : 0
 Certificate (if required) £ : : 12/11 1880
 To be sent as per margin.

J. Stoddart & Co. Engineers, Surveyors to Lloyd's Register of British & Foreign Shipping.

Committee's Minute Liverpool Nov^r 12 - 1880
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 Robert Edmund Taylor & Son Printers, 19, Old Street, Goswell Road, London.