

REPORT ON MACHINERY

LLOYD'S REGISTER OF SHIPS
23 JUN. 83

No. 5287

No. in Reg. Book. Survey held at Beverley & Hulls Cardiff Date, first Survey 6 July '82 Last Survey 9 April 1883

on the iron screw steamer "Alice" Tons 157 Gross 99 Register

Master John Guy Built at Beverley When built 1883

Engines made at Hull By whom made Good & Menzies when made 1882 1883

Boilers made at Hull By whom made d. when made 1882

Registered Horse Power 20 Owners Messrs John Bland & Co. Port belonging to Cardiff

ENGINES, &c.—

Description of Engines Single Cylinder inverted direct Surface condensing

Diameter of Cylinder (in) 20 Length of Stroke 18 No. of Rev. per minute _____ Point of Cut off, High Pressure 1 1/2 Low Pressure _____

Diameter of Screw shaft 4 1/2 Diameter of Tunnel shaft no tunnel Diameter of Crank shaft journals 5 1/2 Diameter of Crank pin 5 1/2 size of Crank web 3 1/2 x 6

Diameter of screw 7.0 Pitch of screw 11.0 No. of blades 3 state whether moveable no total surface 17.5 sq.

diameter of ditto 1 3/4 Stroke 9 Can one be overhauled while the other is at work x

diameter of ditto 1 3/4 Stroke 9 Can one be overhauled while the other is at work x

Hald & Luyne Pumps Size of Pumps 2 1/4 dia x 4 1/2 Where do they pump from sea, Bilge, & tank & deliver

one Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible no

one and sizes 3 in. valves Are they connected to condenser, or to circulating pump circulating

Are they fitted with by rocking levers from piston crosshead

Are they Valves or Cocks Valves (main injection & Kingston)

Are the discharge pipes above or below the deep water line Above

Are the blow-off cocks fitted with a spigot and brass covering plate yes

How are they protected x

Are valves and pumps in connection with the machinery accessible at all times yes in engine room

Are valves arranged so as to prevent an unintentional connection between the sea and the bilges yes

Are propeller, screw shaft, and all connections examined in dry dock now new

Is the hull watertight no tunnel and fitted with a sluice door x worked from x

Description circular multitubular ordinary marine type

Tested by hydraulic pressure to 80 lb Date of test 25th Nov. 82

Heating apparatus or steam chest Vertical cylinder with open bottom

Can the superheater be shut off and the boiler worked separately x

Area of each valve 9.5 sq. in. Are they fitted with easing gear yes

Are they fitted with easing gear x

Are the boilers and bunkers on woodwork bricks

Length of boilers 8.7 description of riveting of shell long. seams alternating lap circum. seams single rivet lap

diameter of rivet holes 13/16 whether punched or drilled punched pitch of rivets long = 2 1/2

per centage of strength of longitudinal joint 67.7 working pressure of shell by rules 50

size of compensating rings 3/4 x 1/2

outside diameter 3 1/4 length, top 6.0 bottom 8.0

description of joint single rivet lap if rings are fitted no greatest length between rings 7.0

plating, thickness, sides 3/8 back 1/2 top 7/16

sides 9 back 8 1/2 to 9 top 11

working pressure of plating by rules 40 lb

working pressure of ditto by rules 50 lb

pitch of stays to ditto 13

diameter of stays at smallest part 1 1/4 to 1 5/8 working pressure by rules 43 lb

Back plates, thickness 1/2 greatest pitch of stays 11 working pressure by rules 50 lb

Diameter of tubes $3\frac{1}{4}$ pitch of tubes $4\frac{1}{2}$ thickness of tube plates, front $\frac{1}{2}$ back $\frac{1}{2}$
 How stayed *nut cast stay tubes* pitch of stays 12 in mid width of water spaces $1\frac{1}{2}$
 Diameter of ~~superheater~~ Steam chest 2.6 length 3.0
 Thickness of plates $7/16$ description of longitudinal joint *single w/lap* diameter of rivet holes $13/16$ pitch of rivets 2
 Working pressure of shell by rules $133\frac{1}{4}$ Diameter of flue \times thickness of plates \times
 If stiffened with rings \times distance between rings \times Working pressure by rules \times
 End plates of ~~superheater~~, or steam chest; thickness $\frac{1}{2}$ How stayed 2 $1\frac{1}{2}$ stays
 Superheater or steam chest; how connected to boiler *by double riveted flange & the 2 vertical stays*

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 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 shell by rules _____ working pressure of furnace by rules _____
 diameter of uptake _____ thickness of plates _____ thickness of water tubes _____

No donkey boiler

The foregoing is a correct description,

Good Manger Manufacturer.

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

*No submitted
that this vessel is now
eligible to have the certificate
L.M.C. received
M. J. M. 28/9/13*

Cardiff 21st June 1883

Seacocks fitted with guards. Handle fitted to donkey pump, and suction pipe to forehold. Easing gear of the safety valves put in order. Flywheel secured to crankshaft. Safety valves seen under steam, blowing at 140 lb working pressure. Engines seen working at full pressure, starting reversing and stopping. Spout gear put on board.

P. E. Heydell

The amount of Entry Fee .. £ 1 : : : received by me, *at Cardiff*
 Special .. £ 8 : 8 : :
 Certificate (if required) *gratis* : : : 29th Sept 1883
 To be sent as per margin.

(Travelling Expenses, if any, £ _____)
 Committee's Minute FRIDAY 28 SEPT 1883 18

J.B.W. 28/9/13

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



Lloyd's Register Foundation