REPORT ON MACHINERY. 21222

Port of Newcastle-on-Tyne Received at London Office FRIDAY 16 MARCH 1888

No. 21222

No. in Reg. Book. Survey held at South Shields Date, first Survey 4th Octr/87 Last Survey March 13th 1888 (Number of Visits 33) 0.65

on the Paddle Steamer "WEXFORD" Tons 140 90 (Gross) 0.65 (Nett)

Master ✓ Built at South Shields By whom built J. T. Eltringham Esq. When built 1888

Engines made at S. Shields By whom made J. P. Rennoldson & Sons when made 1888

Boilers made at S. Shields By whom made J. T. Eltringham Esq. when made 1888

Registered Horse Power 80 NHP Owners Wexford Harbour Comrs Port belonging to Wexford

Reported 13/3/88 print 6 Lon 13/3/88

ENGINES, &c.—

Description of Engines Side Lever

Diameter of Cylinders 28" & 28" Length of Stroke 50 No. of Rev. per minute 40 Point of Cut off, High Pressure 16¼" Low Pressure 16¼

Diameter of Screw shaft ✓ Diam. of Tunnel shaft ✓ Diam. of Crank shaft journals 8" Diam. of Crank pin 5" size of Crank webs 3½" x 8"

Diameter of screw ✓ Pitch of screw ✓ No. of blades ✓ state whether moveable ✓ total surface ✓

No of Feed pumps 2 diameter of ditto 4½" Stroke 15" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 diameter of ditto 4½" Stroke 15" Can one be overhauled while the other is at work Yes

Where do they pump from Engine Room Bilges

No. of Donkey Engines 1 Size of Pumps 6" x 8" Where do they pump from Sea & bilges in engineroom

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 No

No. of bilge injections 2 and sizes 2½ Are they connected to condenser, or to circulating pump Pump

How are the pumps worked Levers

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Cocks & Valves.

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 ✓

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 ✓

Is the screw shaft tunnel watertight ✓ and fitted with a sluice door ✓ worked from ✓

BOILERS, &c.—

Number of Boilers Two Description Cylinl single ended Whether Steel or Iron Steel

Working Pressure 45 lbs Tested by hydraulic pressure to 90 lbs. Date of test December 22nd 1887

Description of superheating apparatus or steam chest Horizontal Dome inside funnel (part).

Can each boiler be worked separately Yes Can the superheater be shut off and the boiler worked separately No

No. of square feet of fire grate surface in each boiler 26 □' Description of safety valves Spring No. to each boiler 2

Area of each valve 8.3 □" 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 12" Diameter of boilers 8' - 9"

Length of boilers 10' - 0" description of riveting of shell long. seams D. L. circum. seams D. L Thickness of shell plates 3/8

Diameter of rivet holes 7/8" whether punched or drilled drilled pitch of rivets 2¾" Lap of plating ✓

Per centage of strength of longitudinal joint 68 working pressure of shell by rules 48 size of manholes in shell 12" x 16"

Size of compensating rings 5" x 3/8". No. of Furnaces in each boiler 2

Outside diameter 33" length, top 7' - 0" bottom 9' - 6" thickness of plates 13 & 15/32 description of joint L. Laps. if rings are fitted no

Greatest length between rings ✓ working pressure of furnace by the rules 60 combustion chamber plating, thickness, sides 15/32 back 15/32 top 15/32

Pitch of stays to ditto, sides 12" back 12½ top 12½ If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules ✓ Diameter of stays at smallest part 15/16" working pressure of ditto by rules 46 end plates in steam space, thickness 21/32"

Pitch of stays to ditto 18" x 18" how stays are secured Nuts & W working pressure by rules 54 diameter of stays at smallest part 1½" working pressure by rules 49 Front plates at bottom, thickness ½" Back plates, thickness 15/32"

Greatest pitch of stays 12" working pressure by rules 47 Diameter of tubes 4" extend pitch of tubes 5⅛" thickness of tube plates, front 21/32" back 9/16" how stayed Tubes pitch of stays 15⅜" width of water spaces 8"

Diameter of Superheater or Steam chest 3' - 3" length 6' 3" thickness of plates 3/8" description of longitudinal joint S. L. lap diam. of rivet holes 7/8

Pitch of rivets 2⅛" working pressure of shell by rules 100 diameter of flue None thickness of plates ✓ If stiffened with rings ✓

Distance between rings ✓ working pressure by rules ✓ ~~end plates of superheater,~~ or steam chest; thickness 9/16" how stayed 3' - 0" radius & one 1½" effective dia stay Superheater or steam chest; how connected to boiler Flanged neck 12" x 16"

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 ________ 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 ________

SPARE GEAR. State the articles supplied :— 4 Piston Bolts — 4 Radius Rod Pins — 2 Trail Crank Bolts — 2 Main Bearing Bolts — 2 Tail Bar Bolts — 1 Gib & Cotter for Connecting Rod — And other stores as per Specification

The foregoing is a correct description,

pp W. J. Oltringham
D. W. Wyllie [illegible] Manufacturer.

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

The Machinery for the above vessel has been constructed under ~~my~~ our survey & is ~~in my~~ our opinion of excellent workmanship & is in safe & good working condition & eligible for classification as + L.M.C-3-88

Main Boilers Safety Valves adjusted under steam to blow at 45 lbs pres.

It is submitted that this vessel is eligible to have the notification + LMC 3.88 recorded

BP
19/3/88

The amount of Entry Fee .. .. £ 1 : — : — ~~not~~ at Newc received ~~by me.~~ £13 only

Special .. .. £ 12 : — : —

Extra attendance 3 : 5 : —

Donkey Boiler Fee .. .. £ — : — : —

Certificate (if required) .. £ — : — : — 17/3/1888 HCA

To be sent as per margin.

(Travelling Expenses, if any, £ ________)

All fees paid 27/3/88

SP 28/3/88

William Gibson & J. Johnstone Browne
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRIDAY 23 MARCH 1888

+ LMC 3/88