

51103

REPORT ON MACHINERY.

To. 5465

Received at London Office Rec'd 27th Nov 1883

No. in Survey held at Hull Date, first Survey Aug 17 83 Last Survey February 1884

on the iron steam ship "ELSY" (Number of Visits 14) Tons 116.20

Master Built at Hull By whom built Edward Wales When built 1883

Engines made at Hull By whom made Edward Wales when made 1883

Boilers made at d. By whom made d. when made 1883

Registered Horse Power 20. Owners Allcock & Barlin Port belonging to Hull.

ENGINES, &c.—

Description of Engines Vertical inverted Cylinders. Compound. surface Condensing.

Diameter of Cylinders 11" + 22" Length of Stroke 15" No. of Rev. per minute 100 Point of Cut off, High Pressure 7/8 Low Pressure 7/8

Diameter of Screw shaft 4" Diam. of Tunnel shaft X Diam. of Crank shaft journals 4" Diam. of Crank pin 4" size of Crank webs 5" x 2 15/16"

Diameter of screw 6:0" Pitch of screw 6/6 5/10 No. of blades 4 state whether moveable no total surface 10:6"

No. of Feed pumps one diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work X

No. of Bilge pumps one diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work X

Where do they pump from main compartments (Engine room & hold)

No. of Donkey Engines one Size of Pumps 2 1/8" x 4" Stroke Where do they pump from Hold & Tank with delivery to boiler deck overhead tank.

Are all the bilge suction pipes fitted with roses yes Are the roses always accessible yes

No. of bilge injections one and sizes 2 1/4" Are they connected to condenser, or to circulating pump In circulating pump

How are the pumps worked by rocking levers from the piston rod crosshead

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

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 X

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

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 now new

Is the screw shaft tunnel watertight no found and fitted with a sluice door Engines are right off

BOILERS, &c.—

Number of Boilers one Description circular, multitubular Whether Steel or Iron iron

Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 27th November 1883

Description of superheating apparatus or steam chest none fitted

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

Area of square feet of fire grate surface in each boiler 17.5 Description of safety valves Spring loaded No. to each boiler 2

Area of each valve 6 1/2 sq. in. Are they fitted with easing gear yes No. of safety valves to superheater X area of each valve 4

Are they fitted with easing gear X Smallest distance between boilers and bunkers on woodwork 10 Diameter of boilers 8:0

Length of boilers 7:2" description of riveting of shell long. seams 4 rows of rivets in circum. seams double rivet lap Thickness of shell plates 7/8

Diameter of rivet holes 15/16" whether punched or drilled punched pitch of rivets 5" Lap of plating 9"

Percentage of strength of longitudinal joint 80 working pressure of shell by rules 85 size of manholes in shell 16" x 12"

No. of compensating rings 28" x 24" x 7/8 No. of Furnaces in each boiler 2

Inside diameter 30" length, top 4:8" bottom 6:6" thickness of plates 7/16" description of joint butted with slope if rings are fitted no

Greatest length between rings 6:6" working pressure of furnace by the rules 87 1/2 combustion chamber plating, thickness, sides 1/2" back 7/16" top 1/2"

Number of stays to ditto, sides 9 1/4" x 6 1/2" back 8 1/2" x 7 1/2" top 9" x 8" If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 80

Diameter of stays at smallest part 1 1/16" + 1 7/16" working pressure of ditto by rules 83 1/2 end plates in steam space, thickness 7/8

Number of stays to ditto 12 1/2" x 12 1/2" how stays are secured double nut washers working pressure by rules 89 1/2 diameter of stays at smallest part 1 7/8" working pressure by rules 106 1/2 Front plates at bottom, thickness 1/2" Back plates, thickness 7/8"

Greatest pitch of stays 12" working pressure by rules 83 1/2 Diameter of tubes 3 1/4" pitch of tubes 4 1/4" thickness of tube

Ship plates, front 7/8" back 11/16" how stayed 30 stay tubes pitch of stays 12 1/4" in mid width of water spaces



MUL396-0379

DONKEY BOILER—

Description *No donkey boiler in this case*

Made at _____ by whom made _____ when made _____ where fixed _____
Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ fire grate area _____
valves _____ No. of safety valves _____ area of each _____ if fitted with easing gear _____ description of safety
enter the donkey boiler _____ diameter of donkey boiler _____ length _____ description of riveting _____ if steam from main boilers can
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:— *2 top 2 bottom Connecting rod Bolts. 2 main bearing Bolts
1 set coupling bolts, 1 set of sea pump valves - 24 bolts nuts & some pieces of iron associated
(Spare gear prepared on shop. - to be placed on board on vessel return)*

The foregoing is a correct description,

Edward Wales Manufacturer.

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

*Workmanship sufficiently good. The machinery & Boiler are now in my
opinion in safe working condition and the case is respectfully submitted
for the notification of L.M.C. in the Register Book*

*It is submitted that this vessel
is eligible to have the
notification + L.M.C. + 2.8 +
recorded*

*D.S.
27/3/84*

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

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

Committee's Minute FRIDAY 23 MARCH 1884

+ [Signature]

