

REPORT ON MACHINERY.

6968

Port of Shull

Received at London Office

JUN 27 1889

Survey held at Shull

Date, first Survey Aug 24/88

Last Survey Jan 20/89

(Number of Visits 43)

Ship on the Iron Steam Trawler Excelsior

Tons 140.16
149.85

Builder Leighton Built at Shull By whom built Cook, Weston & Gemmill When built 1889

Lines made at Shull By whom made Bailey & Leatham when made 1889

Engines made at Shull By whom made Bailey & Leatham when made 1889

Registered Horse Power 45 Owners Shuller Steam T Co Port belonging to Shull

ENGINES, &c.—

Description of Engines Compound Inverted direct acting

Diameter of Cylinders 17.5 Length of Stroke 22 No. of Rev. per minute 110 Point of Cut off, High Pressure .6 Low Pressure .65

Diameter of Screw shaft 6 1/4 Diam. of Tunnel shaft 5 3/4 Diam. of Crank shaft journals 6 1/4 Diam. of Crank pin 6 1/4 size of Crank webs 7 1/2 x 4

Diameter of screw 7.9 Pitch of screw 10.9 x 11.9 No. of blades 4 state whether moveable no total surface 23 sq ft

of Feed pumps one diameter of ditto 2 3/8 Stroke 13 Can one be overhauled while the other is at work -

of Bilge pumps one diameter of ditto 2 3/8 Stroke 13 Can one be overhauled while the other is at work -

Where do they pump from Engine room Bilge & hold.

of Donkey Engines one Size of Pumps 2 3/4 x 4 duplex Where do they pump from Bilge, hold, sea and

and discharges to Boiler Condenser & back & forward, also 5' Geolite with

all the bilge suction pipes fitted with roses Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible -

of bilge injections one and sizes 5 Are they connected to condenser, or to circulating pump Circulating Pump

are the pumps worked By rocking lever from after Engine Piston Rod Crankhead

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

are the pipes carried through the bunkers suction to forward How are they protected wood casing

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

were stern tube, propeller, screw shaft, and all connections examined in dry dock how run launched 1st June 1889

is the screw shaft tunnel watertight - and fitted with a sluice door - worked from -

BOILERS, &c.—

Number of Boilers one Description Cylindrical Invert Material Steel or Iron Steel

Working Pressure 90 lbs Tested by hydraulic pressure to 180 lbs Date of test 21st May 1889

Description of superheating apparatus or steam chest none fitted

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

Area of square feet of fire grate surface in each boiler 300 sq ft Description of safety valves Spring loaded No. to each boiler two

Area of each valve 5.9 sq in 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 8 Diameter of boilers 11.0

Length of boilers 9:6 description of riveting of shell long. seams all chop all circum. seams all in lap Thickness of shell plates 10/16

Diameter of rivet holes 10/16 whether punched or drilled drilled pitch of rivets 4 3/16 Lap of plating 9/16

Percentage of strength of longitudinal joint 74.6% working pressure of shell by rules 91 lbs size of manholes in shell 16 x 12

of compensating rings 1.10 x 2.2 x 10/16 No. of Furnaces in each boiler two

Outside diameter 38 length, top 6:0 bottom 6:0 thickness of plates 1/2 description of joint all chop if rings are fitted -

greatest length between rings - working pressure of furnace by the rules 98 lbs combustion chamber plating, thickness, sides 1/2 back 1/2 top 5/8

Thickness of stays to ditto, sides 9/16 back 9/16 top carried If stays are fitted with nuts or riveted heads nuts working pressure of plating by

rules 90 lbs Diameter of stays at smallest part 1 1/8 working pressure of ditto by rules 93 lbs end plates in steam space, thickness 10/16

Thickness of stays to ditto 1 1/4 how stays are secured all nuts working pressure by rules 90 lbs diameter of stays at

smallest part 1 3/4 working pressure by rules 103 lbs Front plates at bottom, thickness 1/16 Back plates, thickness 10/16

greatest pitch of stays 10 working pressure by rules 90 lbs Diameter of tubes 5 1/2 pitch of tubes 5 1/4 thickness of tube

plates, front 1/16 back 1/16 how stayed stay tubes pitch of stays 11 1/2 width of water spaces 10

Diameter of Superheater or Steam chest - length - thickness of plates - description of longitudinal joint - diam. of rivet holes -

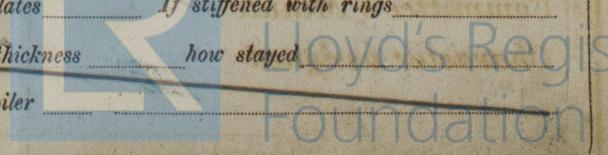
Thickness of rivets - working pressure of shell by rules - diameter of flue - thickness of plates - If stiffened with rings -

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 -

Description of furnaces

HUL 401-0033



DONKEY BOILER— Description *No 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 _____

SPARE GEAR. State the articles supplied:— *Two Top end Bolts, Two Bottom end Bolts, Two
Main Bearing Bolts, One set Coupling Bolts, One set of Sea and Bilge
Stump Bolts.*

The vessel efficient with masts and sails as a Steamer.

The foregoing is a correct description,
J. M. Bailey & Latham Manufacturer.
W. Thompson

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

*The Machinery and Boiler of this Steamer
have been constructed under special survey and placed
onboard in accordance with the Society's Rules, they are now
in my opinion in safe working condition and the case is
respectfully submitted for the certification * L.M.C. 6.89. in the
Register Book.*

W. A.

It is submitted that this vessel is
eligible to have + L.M.C. 6.89
recorded. *W. A.*
27.6.89

The amount of Entry Fee .. £ *1* : - : - received by me,
Special .. £ *8* : - : -
Donkey Boiler Fee .. £ *✓* : : :
Certificate (if required) .. £ *✓* : : : *26/6/18 89.*
To be sent as per margin.

(Travelling Expenses, if any, £ *✓*)
Committee's Minute **FRIDAY 28 JUNE 1889**
+ L.M.C. 6/89

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

