

REPORT ON MACHINERY.

40786

No. _____ (Received at London Office 12-9-1881)

No. in Survey held at London Date, first Survey 5 May Last Survey 10th Sept 1881
 Reg. Book. _____

on the Wood Screw Tug "James Searle" Tons _____

Master _____ Built at Poplar When built 1881

Engines made at Warrakell By whom made A. Wilson & Co when made 1881

Boilers made at Millwall By whom made J. Hodge & Sons when made 1881

Registered Horse Power 40 nom. Owners _____ Port belonging to _____

ENGINES, &c.—

Description of Engines Inverted directacting compound surface condensing.

Diameter of Cylinders 15" & 27" Length of Stroke 18" No. of Rev. per minute 115 Point of Cut off, High Pressure 7 Low Pressure 7

Diameter of Screw shaft 4 3/4" Diameter of Tunnel shaft 4 3/4" Diameter of Crank shaft journals 5" Diameter of Crank pin 5" size of Crank webs 6x3 1/2"

Diameter of screw 6' 0" Pitch of screw 10' 6" No. of blades 3 state whether moveable no total surface 92 sq ft.

No. of Feed pumps one diameter of ditto 2" Stroke 9" Can it be overhauled while the other is at work yes

No. of Bilge pumps one diameter of ditto 2" Stroke 9" Can one be overhauled while the other is at work yes

Where do they pump from Engine room bilge.

No. of Donkey Engines one Size of Pumps 2 1/2" diam 6' Stroke Where do they pump from Sea & Bilge.

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" 5 ft Are they connected to condenser, or to circulating pump Circulating pump

How are the pumps worked Suvers from LP Crossover to Circulating Pump & from HP Crossover to air feed & bilge pumps

Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks valves for suction, cocks for blow off

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 _____

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 On ship when new.

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

BOILERS, &c.—

Number of Boilers one Description Cylindrical return multitubular

Working Pressure 70 lbs Tested by hydraulic pressure to 140 lbs. Date of test 16.8.81

Description of superheating apparatus or steam chest Steam Dome

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

No. of square feet of fire grate surface in each boiler 27 ft Description of safety valves Roberts spring

No. to each boiler two area of each valve 7 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 9" to bunkers

Diameter of boilers 103 1/2" Length of boilers 9' 0" description of riveting of shell long. seams Double Riv. butt circum. seams Single Riv lap.

Thickness of shell plates 5/8" diameter of rivet holes 13/16 whether punched or drilled punched pitch of rivets 2 1/8

Lap of plating _____ per centage of strength of longitudinal joint 71 1/2 % working pressure of shell by rules 78 lbs.

Size of manholes in shell 15" diam size of compensating rings neckpiece to Dome

No. of Furnaces in each boiler two outside diameter 30 7/8" length, top 6' 0" bottom 8' 0"

Thickness of plates 13/32 & 7/16 description of joint Butt if rings are fitted no greatest length between rings _____

Working pressure of furnace by the rules 80 & 70 lbs.

Combustion chamber plating, thickness, sides 7/16" back 7/16" top 7/16"

Pitch of stays to ditto _____ sides 8" back 8" top 8"

If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 85 lbs.

Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 145 lbs

End plates in steam space, thickness 5/8" pitch of stays to ditto 14" how stays are secured double nut

Working pressure by rules 72 lbs. diameter of stays at smallest part 1 3/4" working pressure by rules 77 lbs

Front plates at bottom, thickness 5/8" Back plates, thickness 5/8" greatest pitch of stays 12" working pressure by rules 70 lbs

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Diameter of tubes 3" pitch of tubes 3 1/2" & 4" thickness of tube plates, front 5/8" back 5/8"
How stayed Stay Tubes pitch of stays 12" width of water spaces 9"
Diameter of Superheater or Steam chest 36" length 8' 3" 6"
Thickness of plates 3/8" description of longitudinal joint lap diameter of rivet holes pitch of rivets
Working pressure of shell by rules ample 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 1/2" How stayed stayed
Superheater or steam chest; how connected to boiler flanged neck piece

DONKEY BOILER—

Description none

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

The foregoing is a correct description,

Alex Wils Manufacturer.

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

The material and workmanship are good. The machinery & boiler have been tried under steam & the safety valve set to the working pressure of 70 lbs per sq inch. The engines are fitted with Jays patent slide valve gear. In my opinion the machinery is eligible to have the notification of Lloyd's M. Cg. 81 recorded in the Register Book.

This submitted that this vessel is eligible to have the notification of Lloyd's M.C. recorded
M 12/9/81

The amount of Entry Fee £ / : : received by me,

Special £ 8 : 8 : 0

Certificate (if required) .. £ Gratis 14/9/81

To be sent as per margin.

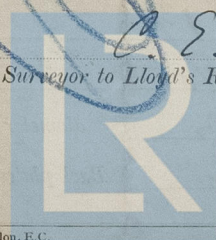
(Travelling Expenses, if any, £)

Committee's Minute

Tuesday, September, 13th 1881.

+ Lloyd's

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



Lloyd's Register
Foundation