

REPORT ON MACHINERY.

5994

Port of *Little*

THURS 3 OCT 1889

Received at London Office

N^o 5994

Survey held at *Little*

Date, first Survey *13 March*

Last Survey *28th Sept. 1889*

(Number of Visits *33*)

389.78

Tons *236.79*

on the

Stul & S. "Mabel"

J. Holmes

Built at *Little*

By whom built *S. H. Morton & Co.*

When built *1889*

made at

Little

By whom made

S. H. Morton & Co.

when made

Do

ers made at

Do

By whom made

Do

when made

Do

Registered Horse Power

Do

Owners

A. Burnett & Sons

Port belonging to *London*

GINES, &c.—

Option of Engines

Triple Expansion

meter of Cylinders *14x22x36* Length of Stroke *24* No. of Rev. per minute *110* Point of Cut off, High Pressure *6* Low Pressure *6*

meter of Screw shaft *7 1/2* Diam. of Tunnel shaft *6 1/2* Diam. of Crank shaft journals *7* Diam. of Crank pin *7* size of Crank webs *8 1/2 x 6 1/2*

meter of screw *8-6* Pitch of screw *12-6* No. of blades *four* state whether moveable *no* total surface *33 1/2*

of Feed pumps *two* diameter of ditto *9 1/2* Stroke *12* Can one be overhauled while the other is at work *yes*

of Bilge pumps *two* diameter of ditto *2 1/2* Stroke *12* Can one be overhauled while the other is at work *yes*

where do they pump from *Bilges*

of Donkey Engines *one* Size of Pumps *6x4x9-2 off.* Where do they pump from *Sea, hotwell, boiler, &*

all compartments

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*

of bilge injections *one* and sizes *3* Are they connected to condenser, or to circulating pump

are the pumps worked *Power*

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

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*

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*

that pipes are carried through the bunkers *none* How are they protected *—*

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

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 *while building*

the screw shaft tunnel watertight *yes* and fitted with a sluice door *yes* worked from *Top platform*

BOILERS, &c.—

Number of Boilers *One* Description *Cylindrical Multi.* Whether Steel or Iron *Stul (S)*

Working Pressure *160* Tested by hydraulic pressure to *320* Date of test *21/8/89 R^o 164*

Description of superheating apparatus or steam chest *None*

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 *42 1/2* Description of safety valves *Spring* No. to each boiler *two*

Area of each valve *7.07* 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 *11"* Diameter of boilers *11-10*

Length of boilers *10-1* description of riveting of shell long. seams *DBS, T.R.* circum. seams *L.D.R.* Thickness of shell plates *1 1/6*

Diameter of rivet holes *13/16* whether punched or drilled *D* pitch of rivets *7* Lap of plating *9*

Per centage of strength of longitudinal joint *83* working pressure of shell by rules *160* size of manholes in shell *16x12*

Size of compensating rings *McQuillan Patent* No. of Furnaces in each boiler *three*

Outside diameter *2-9* length, top *6-9* bottom *6-9* thickness of plates *7/16* description of joint *welded* if rings are fitted *—*

Greatest length between rings *—* working pressure of furnace by the rules *212* combustion chamber plating, thickness, sides *5/8* back *5/8* top *5/8*

Pitch of stays to ditto, sides *7 3/4* back *7 3/4* top *7 3/4 x 7 1/2* if stays are fitted with nuts or riveted heads *nuts* working pressure of plating by rules *200*

Diameter of stays at smallest part *1 1/8* working pressure of ditto by rules *6400* end plates in steam space, thickness *1*

Pitch of stays to ditto *15x13* how stays are secured *DR.R.W.* working pressure by rules *170* diameter of stays at smallest part *3 3/8*

working pressure by rules *88 1/2* Front plates at bottom, thickness *3/4* Back plates, thickness *3/4*

Greatest pitch of stays *Per Section* working pressure by rules *—* Diameter of tubes *3* pitch of tubes *4 1/4 x 4 1/8* thickness of tube plates, front *3/4* back *3/4*

how stayed *Stay tubes* pitch of stays *8 1/2 x 8 1/4* width of water spaces *5 1/2*

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

Pitch 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 *—*

McQuillan Patent

Lloyd's Register Foundation

LTH559-0036

DONKEY BOILER— Description *vertical diagonal uptake, 2 cross tubes*
 Made at *Clark Chapman* by whom made *Gateshead* when made *18.89* where fixed *stokehold*
 Working pressure *160* tested by hydraulic pressure to *320* No. of Certificate *2946* fire grate area *12.5 sq ft* description of safety valves *Spring*
 No. of safety valves *One* area of each *5.3* if fitted with easing gear *yes* if steam from main boilers enter the donkey boiler *no*
 diameter of donkey boiler *5-0* length *9-0* description of riveting *duplex riv. lap*
 Thickness of shell plates *9/32* diameter of rivet holes *7/8* whether punched or drilled *drilled* pitch of rivets *3 1/6* lap of plating *6 1/8*
 per centage of strength of joint *77* thickness of crown plates *3/4* stayed by *5 stays 1 1/4 dia. uptake*
 Diameter of furnace, top *3-5* bottom *4-3* length of furnace *4-0* thickness of plates *5/8* description of joint *single riv. lap*
 Thickness of furnace crown plates *5/8* stayed by *as shell crown* working pressure of shell by rules *175*
 Working pressure of furnace by rules *160* diameter of uptake *12"* thickness of plates *7/16* thickness of water tubes *7/16*
SPARE GEAR. State the articles supplied:— *As per Rule.*

The foregoing is a correct description,
Wm Hugh Maton & Co Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery of this vessel has been built under special survey, workmanship materials good.
The approved photo tracing & firing report are sent herewith.

The main and donkey boilers have been run under steam, & the safety valves adjusted to blow at 160 lbs per sq in.

The machinery of this vessel is now in good condition reliable, in my opinion, to be classed & marked in Reg. Book + L.M.C. 10-89
It is submitted that this vessel is eligible to have + L.M.C. 9.89. recorded—

The amount of Entry Fee .. £ 1 : : received by me,
 Special .. £ 12 : :
 Donkey Boiler Fee .. £ — : :
 Certificate (if required) .. £ *Gratis* 18/9
 To be sent as per margin.
 (Travelling Expenses, if any, £ *none*)

Committee's Minute

TUES 6 OCT 1889

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

