

REPORT ON MACHINERY.

Port of Sunderland

Received at London Office

18

Survey held at Sunderland

Date, first Survey 28th Febry

Last Survey 12th August 1890

Ship S.S. "Alleghany"

Master Built at Stockton

By whom built Craig Taylor & Co

Gross 2913.67

Net 1910.6

When built 1890

at Sunderland By whom made John Dickinson

when made 1890

at Sunderland By whom made John Dickinson

when made 1890

orse Power 250

Owners J. S. Barwick

Port belonging to London

Sc. —

Engines Triple compound, three cranks

No. of Cylinders 3

rs 25.40.66

Length of Stroke 45

Rev. per minute 60

Point of Cut off, High Pressure 1/2 stroke

Low Pressure 1/2 stroke

shaft 12 1/2

Diam. of Tunnel shaft 12

Diam. of Crank shaft journals 12 1/2

Diam. of Crank pin 12 1/2

size of Crank webs patent

ew 14-0

Pitch of screw 1 1/4-0

No. of blades 4

state whether moveable not total surface 80 sq

mps 2

diameter of ditto 4

Stroke 21

Can one be overhauled while the other is at work yes

mps 2

diameter of ditto 4 1/2

Stroke 21

Can one be overhauled while the other is at work yes

pump from Engine room

after well after peak & after tank

Engines 2

Size of Pumps 8 x 4 1/2 x 6

Where do they pump from engine room after

after peak & after tank

suction pipes fitted with roses yes

Are the roses always accessible yes

Are the sluices on Engine room bulkheads always accessible no sluices

ections 1

and sizes 4

Are they connected to condenser or to circulating pump circulating pump

pumps worked by levers on middle engine

ions with the sea direct on the skin of the ship yes

Are they Valves or Cocks both

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

led 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

carried through the bunkers none

How are they protected

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

cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges yes

tern tube, propeller, screw shaft, and all connections examined in dry dock new vessel

shaft tunnel watertight not turned

and fitted with a sluice door

worked from

Sc. —

Description Ordinary marine type

Material Steel

Letter (for record) S

ssure 150 lbs

Tested by hydraulic pressure to 300 lbs

Date of test 9-4-90

superheating apparatus or steam chest none

er be worked separately yes

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

feet of fire grate surface in each boiler 42 sq

Description of safety valves direct spring

No. to each boiler 2

valve 8.30

Are they fitted with easing gear yes

No. of safety valves to superheater

area of each valve

d with easing gear

Smallest distance between boilers and bunkers or woodwork 8"

Diameter of boilers 12-6"

ers 16-0"

description of riveting of shell long. seams treble riv-double butt straps

middle seams treble ends ditto

Thickness of shell plates 1 1/2"

rivet holes 1 1/4"

whether punched or drilled drilled

pitch of rivets 8 7/8"

Lap of plating 14 5/8"

strength of longitudinal joint 84.47

working pressure of shell by rules 153 lbs

size of manholes in shell 16 x 12"

seating rings 8 1/2 x 1 1/2

No. of Furnaces in each boiler 4

Description of Furnaces forced patent

ter 3-11

length 6 feet

thickness of plates 9/16"

description of joint welded

if rings are fitted no

th between rings

working pressure of furnace by the rules 150 lbs

combustion chamber plating, thickness, sides 9/16"

back top 9/16"

s to ditto, sides 7 1/4 x 7 1/8

back top 7 1/4 x 7 1/8

stays are fitted with nuts or riveted heads nuts

working pressure of plating by

Diameter of stays at smallest part 1 3/8"

working pressure of ditto by rules 164 lbs

and plates in steam space, thickness 1 1/8"

s to ditto 1 1/4 x 1 1/8"

how stays are secured nuts

working pressure by rules 150 lbs

diameter of stays at

art 2 7/8"

working pressure by rules 160 lbs

Front plates at bottom, thickness 3/4"

Back plates, thickness none

of stays

working pressure by rules

Diameter of tubes 3 1/4"

pitch of tubes 4 1/2"

thickness of tube

mt 13

back 15

how stayed stay tubes

pitch of stays 9 x 9"

width of water spaces 1 1/4"

Superheater or Steam chest none

length

thickness of plates

description of longitudinal joint

diam. of rivet holes

working pressure of shell by rules

diameter of flue

thickness of plates

If stiffened with rings

working pressure by rules

end plates of superheater, or steam chest; thickness

how stayed

ating surface 4800 sq

Superheater or steam chest; how connected to boiler

MDB 740/68

DONKEY BOILER— Description *Ordinary marine type with two furnaces*
 Made at *Stockton* by whom made *Riley Brothers* when made *19-6-90* where fixed *upper deck*
 Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *1060* fire grate area *18 Sq. feet* description of sd.
 valves *direct spring* No. of safety valves *1* area of each *10.32* if fitted with easing gear *Yes* if steam from main boilers
 enter the donkey boiler *10* diameter of donkey boiler *8'0"* length *7'6"* description of riveting *Lap Double*
 Thickness of shell plates *1/2"* diameter of rivet holes *3/8"* whether punched or drilled *drilled* pitch of rivets *2 3/8"* lap of plating *4 1/2"*
 per centage of strength of joint *70* thickness of *top* plates *5/8"* stayed by *1 1/2" Stays (Sp. an)* pitch *15 1/2" x 11"*
 Diameter of furnace, top *2 1/2"* bottom *2 1/2"* length of furnace *4'8 1/2"* thickness of plates *3/4"* description of joint *Lap Single*
 Thickness of furnace crown plates *5/32"* stayed by *1 1/2" Stays* pitch *4 1/2" x 4 1/2"* working pressure of shell by rules *79*
 Working pressure of furnace by rules *81 1/2* diameter of uptake *3"* thickness of plates *5/8"* thickness of water tube

SPARE GEAR. State the articles supplied:—*Le crank web and shank, tail end and*
and bottom end connecting rod bolts & nuts, two main bearings
one set of coupling bolts & nuts, feed and bilge pump valves,
nuts & iron assortment.

FOR JOHN DICKINSON The foregoing is a correct description,

Manufacturer of main engines & boilers.

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

The main steam pipes have been tested by hydraulic pressure.
 The machinery has been constructed under special survey. The
 material and workmanship are good and efficient and the
 engines when tried under steam work well & satisfactorily.
 This vessel is being fitted with the electric light, the plant being manuf-
 actured by Howard & Taylor & Co. of London, the system being multiple arc
 with incandescent lamps in vacuum.
 In my opinion the machinery of this vessel is in good order and safe
 working condition and eligible for the notification in the
 Register Book of LMC 8-90 when the following work has been
 satisfactorily completed. Engine seating efficiently strengthened.
 donkey boiler tried under steam, suction fitted to full peak and
 electric light fitted.

The engine seating has been stiffened by the fitting of
 intercostal plates and brackets. The Donkey Boiler safety valve
 have been set. The electric light has been tried and worked
 well; its fittings are all accessible and the insulating
 materials used are of the best kind. No engine suction
 has been fitted to the forepeak as water Ballast will not
 be carried there.

Wm. Austin 12th August 1890

It is submitted that this vessel is eligible
 to have LMC 8-90 recorded

The amount of Entry Fee £ *2* : : received by me,
 Special £ *34* : *15* :
 Donkey Boiler Fee £ : :
 Certificate (if required) £ : :
 To be sent as per margin.
 (Travelling Expenses, if any, £ : :)

Committee's Mi

FRI 15 AUGUST 1890

Paul Salmon

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

+ LMC 8-90

