

REPORT ON MACHINERY.

15841

Port of Sunderland

Received at London Office

MON 27 MAY 1889

5041

Survey held at Sunderland

Date, first Survey 18th Octr/88 Last Survey 15th May 1889

(Number of Visits 27)

2944

Tons 1410

on the S.S. 'Deddington'

J Wright Built at Sunderland By whom built J Priestman & Co

When built 1889

made at Sunderland By whom made George Clark

when made 1889

made at Sunderland By whom made George Clark

when made 1889

red Horse Power 180 200 Owners H Samman

Port belonging to Hull

Engines, &c.—

ion of Engines Triple compound

r of Cylinders 21.35.54½ Length of Stroke 39" No. of Rev. per minute 60 Point of Cut off, High Pressure ½ stroke Low Pressure ½ stroke

r of Screw shaft 10½" Diam. of Tunnel shaft 10½" Diam. of Crank shaft journals 10½" Diam. of Crank pin 10½" size of Crank webs 21½" x 4½"

r of screw 14-9" Pitch of screw 15-9" No. of blades 4 state whether moveable not total surface 68½ sq ft

Feed pumps 2 diameter of ditto 3½" Stroke 21" Can one be overhauled while the other is at work yes

Bilge pumps 2 diameter of ditto 4½" Stroke 21" Can one be overhauled while the other is at work yes

do they pump from Fore hold, fore & main tanks, engine room, after tank, & after well

Donkey Engines two Size of Pumps 8" x 10" & 3½" x 5" Where do they pump from Sea, hot well, fore hold

nks, engine room and after well

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

bilge injections one and sizes 4" Are they connected to condenser, or to circulating pump circulating pump

the pumps worked by levers on intermediate engine

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

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

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

pipes are carried through the bunkers none How are they protected by covers

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

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

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

crew shaft tunnel watertight yes and fitted with a sluice door yes worked from top platform

ERS, &c.—

of Boilers 2 Description single ended, ordinary type Whether Steel or Iron Steel, excepting tubes

Pressure 160 lbs Tested by hydraulic pressure to 320 lbs Date of test 5-4-89 (4 screw stamp)

ion of superheating apparatus or steam chest none

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

square feet of fire grate surface in each boiler 49 sq ft Description of safety valves direct spring No. to each boiler 2

each valve 9.62 sq ft Are they fitted with easing gear yes No. of safety valves to superheater — area of each valve —

fitted with easing gear — Smallest distance between boilers and bunkers or woodwork 13" Diameter of boilers 12-11"

of boilers 10-6" description of riveting of shell long. seams treble riv'd butt Circum. seams double riv'd lap Thickness of shell plates 1½"

r of rivet holes 1½" whether punched or drilled drilled pitch of rivets 8" & 4" Lap of plating 14½" straps

ne of strength of longitudinal joint 85.10 working pressure of shell by rules 164 lbs size of manholes in shell 16 x 13"

compensating rings 4½" x 1½" No. of Furnaces in each boiler 3

diameter 3-4½" length, top 4-0" bottom 4-0" thickness of plates 9/16" description of joint ribbed if rings are fitted no

length between rings — working pressure of furnace by the rules 140 lbs combustion chamber plating, thickness, sides 9/16" back 9/16" top 9/16"

stays to ditto, sides 7½" x 7½" back 7½" x 7½" top radius 8" 24" stays are fitted with nuts or riveted heads nuts working pressure of plating by

162 lbs Diameter of stays at smallest part 1½" working pressure of ditto by rules 140 lbs end plates in steam space, thickness 3/32"

stays to ditto 15" x 14½" how stays are secured nuts working pressure by rules 160 lbs diameter of stays at

st part 2-28" working pressure by rules 165 lbs Front plates at bottom, thickness 1/16" Back plates, thickness 3/4"

th of stays 11" working pressure by rules 160 lbs Diameter of tubes 3½" pitch of tubes 4½" x 4½" thickness of tube

front 7/8" back 3/4" how stayed stay tubes pitch of stays 8½" x 8½" width of water spaces 1½" & 1½"

Superheater or Steam chest none length — thickness of plates — description of longitudinal joint — diam. of rivet holes —

ets — working pressure of shell by rules — diameter of flue — thickness of plates — If stiffened with rings —

etween 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, boilers, &c.

DONKEY BOILER— Description *Vertical with four cross tubes*
Made at *Newcastle* by whom made *Nicholson Brothers* when made *19-2-89* where fixed *Stokehold*
Working pressure *40 lbs* tested by hydraulic pressure to *140 lbs* No. of Certificate *2440* fire grate area *23 sq* description of safety
valves *Direct spring* No. of safety valves *2* area of each *9.62 sq* if fitted with easing gear *yes* if steam from main boilers can
enter the donkey boiler *no* diameter of donkey boiler *6-3"* length *13-6"* description of riveting *double riv'd lap*
Thickness of shell plates *3/8"* diameter of rivet holes *13/16"* whether punched or drilled *drilled* pitch of rivets *2 3/4"* lap of plating *3 3/4"*
per centage of strength of joint *40.4%* thickness of crown plates *1/2"* stayed by *6 stays 1 1/2" effective diameter*
Diameter of furnace, top *5-0"* bottom *5-8"* length of furnace *4-0"* thickness of plates *9/16"* description of joint *single riv'd lap*
Thickness of furnace crown plates *1/2"* stayed by *six stays 1 1/2" diameter* working pressure of shell by rules *40 lbs*
Working pressure of furnace by rules *40 lbs* diameter of uptake *16"* thickness of plates *3/8"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *Top and bottom end connecting rod bolts, two main bearing bolts, nuts, one set of coupling bottom nuts, feed and bilge pump valves, propeller bolts, nuts and iron assembly*

The foregoing is a correct description,
per Geo. Claver Manufacturer of main engine boilers
Henry Claver

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

The main steam pipes have been tested by hydraulic pressure to 320 lbs per square inch. The machinery has been constructed special survey. the material and workmanship are good and efficient and the engine when tried under steam worked satisfactorily. In my opinion the machinery of this vessel is good order and safe working condition and eligible for the notification in the Register Book of L.M.C. 5-89.

It is submitted that the vessel is fit to be licensed for service.
Done & Signed J.M.C. 5-89

Carroll

The amount of Entry Fee .. £ *2 : 0* :— received by me, *at 19/5/89*
(Special *20/5/89*) .. £ *24 : 0* :—
Donkey Boiler Fee .. £ *30 : 0* :—
Certificate (if required) .. £ : :—
To be sent as per margin.
(Travelling Expenses, if any, £ : :—)

Committee's Minute *FRIDAY 31 MAY 1889*
+ Lm 6 5/89

Pat R Salmon 2021
Engineer Surveyor to Lloyd's Register of British & Foreign Steamships

