

REPORT ON MACHINERY.

43075

No. _____ Received at London Office _____ 18
 No. in Survey held at London Date, first Survey _____ Last Survey June 18th 1885
 Reg. Book. _____ (Number of Visits _____) Tons _____
 on the S. S. Suso
 Master _____ Built at Deptford By whom built London Dry docks Co. When built 1885.
 Engines made at _____ By whom made _____ when made _____
 Boilers made at East Greenwich By whom made Appleby Bros. when made 1885.
 Registered Horse Power 55 Owners _____ Port belonging to _____

ENGINES, &c.—

Description of Engines Swtd. Compd. Surf. Cond
 Diameter of Cylinders 18 + 35 Length of Stroke 24 No. of Rev. per minute _____ Point of Cut off, High Pressure _____ Low Pressure _____
 Diameter of Screw shaft 6 Diam. of Tunnel shaft 6 Diam. of Crank shaft journals 6 Diam. of Crank pin 6 size of Crank webs 7 x 4 1/2
 Diameter of screw 9/16 Pitch of screw 12.6 No. of blades 4 state whether moveable no total surface _____
 No. of Feed pumps one diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work
 No. of Bilge pumps one diameter of ditto 3 Stroke 12 Can one be overhauled while the other is at work
 Where do they pump from Fore & Aft Hold & Eng. Rm.
 No. of Donkey Engines One Size of Pumps 2 1/2 dia. 9 in stroke Where do they pump from Fore & Aft Hold & Eng. Rm.
 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 4 1/2 Are they connected to condenser, or to circulating pump circ. pump
 How are the pumps worked By levers from crosshead
 Are 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
 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 April 21st 1885
 Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from Platform on top of cyl. cond.

BOILERS, &c.—

Number of Boilers One Description Multitubular Whether Steel or Iron Iron
 Working Pressure 80 lbs Tested by hydraulic pressure to 160 Date of test April 7th 1885
 Description of superheating apparatus or steam chest Horizontal 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 36 Description of safety valves Direct spring No. to each boiler Two
 Area of each valve 28.2 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 10" Diameter of boilers 10.2"
 Length of boilers 9.8 description of riveting of shell long. seams double lap circum. seams single lap Thickness of shell plates 13/16
 Diameter of rivet holes 1 5/16 whether punched or drilled punched pitch of rivets 4 1/4 Lap of plating 6 1/4
 Percentage of strength of longitudinal joint 70% working pressure of shell by rules 80 lbs size of manholes in shell 18 x 14
 Size of compensating rings 6 x 6 Angle irons No. of Furnaces in each boiler Two
 Outside diameter 3.1 length, top 6.4 1/4 bottom 6.4 1/4 thickness of plates 15/32 description of joint single lap if rings are fitted no
 Greatest length between rings working pressure of furnace by the rules 84 lbs combustion chamber plating, thickness, sides 7/16 back 7/16 top 7/16
 Pitch of stays to ditto, sides 7" back 7 1/2" top 9 3/4" If stays are fitted with nuts or riveted heads rivtd. hds. working pressure of plating by rules 74 lbs Diameter of stays at smallest part 1 1/4 working pressure of ditto by rules 94 lbs end plates in steam space, thickness 5/8
 Pitch of stays to ditto 1.1 1/4 how stays are secured double nuts working pressure by rules 80 lbs diameter of stays at smallest part 1 3/4 working pressure by rules 82 lbs Front plates at bottom, thickness 5/8 Back plates, thickness 1/2
 Greatest pitch of stays 7 1/2 working pressure by rules 128 lbs Diameter of tubes 3 1/4 pitch of tubes 4 1/2 thickness of tube plates, front 3/4 back 3/4 how stayed stay tubes pitch of stays 13 1/2 width of water spaces 4 3/4
 Diameter of Superheater or Steam chest 2 ft length 5.10 thickness of plates 3/8 description of longitudinal joint welded 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 1/2 how stayed 1 1/2 round stay
 Superheater or steam chest; how connected to boiler rust pieces

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DONKEY BOILER— Description

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:— *Grant shaft. Tail shaft. 2 connectg. rod top end bolts & nuts. 2 Bolt. end do. 2 Main bearing bolts. 1 set complg. bolts. 1 set feed & bilge pump valves & seats. 2 sets piston springs. Assorted bolts & nuts. Some of various sizes.*

The foregoing is a correct description,

London Dry Dock Co. Limited Manufacturer.
W. H. Hallister, Director

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

good. The machinery has been built under Special Survey. Engines worked satisfactorily under steam. The machinery of this vessel is now in good & safe working condition & eligible in my opinion to be marked with F.L.M.C.G. 85.

The amount of Entry Fee .. £ 1 : : : received by me,
 21/6/85 Special £ 8 : 5 : :
 Donkey Boiler Fee £ : : : :
 Certificate (if required) .. £ gratis : : : 24/5 18 85
 To be sent as per margin.
 (Travelling Expenses, if any, £ 1/14. *W. H. Hallister*)

Geo. P. Wilkinson
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRIDAY 19 JUNE 1885**

