

# REPORT ON MACHINERY.

6910

No. 6910 Port of Hull Received at London Office MON 6 MAY 1889  
 No. in Survey held at Hull Date, first Survey Jan 18<sup>th</sup> Last Survey Apr 26<sup>th</sup> 1889  
 Reg. Book. (Number of Visits 17) Tons 106.97  
 3/4 in. Sph on the Iron screw Steamer Rugby (Maiden)  
 Master Grant Built at Hull By whom built Charles Co Lim When built 1889  
 Engines made at Hull By whom made Charles Co Lim when made 1889  
 Boilers made at Hull By whom made Charles Co Lim when made 1889  
 Registered Horse Power 44 Owners G J Haight Port belonging to Grimby

## ENGINES, &c.—

Description of Engines Compound Inverted direct acting  
 Diameter of Cylinders 14" x 52" Length of Stroke 21" No. of Rev. per minute 135 Point of Cut off, High Pressure 6 1/4 Low Pressure 6 5/8  
 Diameter of Screw shaft 5 3/4 Diam. of Tunnel shaft 5 1/2 Diam. of Crank shaft journals 5 3/4 Diam. of Crank pin 5 3/4 size of Crank webs 6 3/4 x 4 1/4  
 Diameter of screw 4.6 Pitch of screw 7.0 x 9.0 No. of blades 3 state whether moveable no total surface 16 sq ft  
 No. of Feed pumps one diameter of ditto 2 1/2 Stroke 10" Can one be overhauled while the other is at work —  
 No. of Bilge pumps one diameter of ditto 3" Stroke 10" Can one be overhauled while the other is at work —  
 Where do they pump from Engine room Bilge holds Sea  
 No. of Donkey Engines one Size of Pumps 2 3/4 x 4" duplex Where do they pump from Engine room Bilge, hold  
Sea, Discharges Boiler back overboard. Also 3" Ejector with suction in the  
Engine room Bilge and discharge on deck.  
 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 —  
 No. of bilge injections one and sizes 2 1/2 Are they connected to condenser, or to circulating pump Circulating Pump.  
 How are the pumps worked By working levers from forward Engine piston rod 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 Suction to forward How are they protected wood cased  
 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 now new launched 7<sup>th</sup> March 89  
 Is the screw shaft tunnel watertight — and fitted with a sluice door — worked from —

## BOILERS, &c.—

Number of Boilers one Description Cylindrical hull Whether Steel or Iron Steel  
 Working Pressure 90 lb Tested by hydraulic pressure to 180 lb Date of test 30<sup>th</sup> March 1889  
 Description of superheating apparatus or steam chest none fitted  
 Can each boiler be worked separately — Can the superheater be shut off and the boiler worked separately —  
 Area of square feet of fire grate surface in each boiler 26.8 sq ft Description of safety valves Spring loaded No. to each boiler 2  
 Area of each valve 5.9 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 8" Diameter of boilers 10.0'  
 Length of boilers 9.0' description of riveting of shell long. seams double strap all circum. seams all in lap Thickness of shell plates 19/32"  
 Diameter of rivet holes 13/16" whether punched or drilled drilled pitch of rivets 3 3/8" Lap of plating 8 1/2"  
 Percentage of strength of longitudinal joint 75.9% working pressure of shell by rules 93 lb size of manholes in shell 16" x 12"  
 Size of compensating rings 2.6" x 2.4" x 19/32" No. of Furnaces in each boiler two  
 Outside diameter 35" length, top 6.0' bottom 6.0' thickness of plates 1/2" description of joint welded if rings are fitted —  
 Greatest length between rings — working pressure of furnace by the rules 107 lb combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"  
 Pitch of stays to ditto, sides 9" back 9" top 9" If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 95 lb Diameter of stays at smallest part 1 1/8" working pressure of ditto by rules 97 lb end plates in steam space, thickness 13/16"  
 Pitch of stays to ditto 15" how stays are secured all nuts working pressure by rules 105 lb diameter of stays at smallest part 1 3/4" working pressure by rules 96 lb Front plates at bottom, thickness 7/8" Back plates, thickness 7/8"  
 Greatest pitch of stays 10" working pressure by rules 90 lb Diameter of tubes 3 1/4" pitch of tubes 14 1/2" thickness of tube plates, front 7/8" back 7/8" how stayed diag. lat. pitch of stays 13 1/2" x 9" width of water spaces 10"  
 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 —

Description of furnaces

HUL401-0304



DONKEY BOILER— Description *No Donkey Boiler*  
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:— *The Top end bolts, The Bottom end bolts, The  
Main Bearing bolts One set Coupling bolts One set Sea Sledge Pump  
bolts*

*The vessel efficient with masts and sails as a Hawker*

The foregoing is a correct description,

SHIPLEY'S  
SHIPBUILDING & ENGINEERING CO. LIMITED

*Alston*

Manufacturer.

GENERAL MANAGER & DIRECTOR

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

*The Machinery and Boiler of this Steam Hawker  
have been constructed under Special Survey and placed on  
board in accordance with the Society's Rules. They are now in  
my opinion in safe working condition and respectfully  
submitted for the Notification L.M.C. 4. 89. in the Register  
Book.*

*Law*

*It is submitted that this V  
is eligible to have + L.M.C.  
recorded. M.A.*

*6.5.89*

The amount of Entry Fee . . . £ 1 : - : - received by me,

Special . . . £ 8 : - : -

Donkey Boiler Fee . . . £ : : :

Certificate (if required) . . . £ : : :

To be sent as per margin.

(Travelling Expenses, if any, £ : : :)

Committee's Minute

TUES 7 MAY 1889

FRIDAY 24 MAY 1889

*+ L.M.C. 4/89*

Engineer Surveyor to Lloyd's Register of British & Foreign



Lloyd's Register  
Foundation