

REPORT ON MACHINERY.

*40965

No. _____ (Received in London Office 8. 12. 1881)
 No. in Reg. Book. *Survey held at London & Birmingham* Date, first Survey *28 Oct.* Last Survey *30 Nov 1881*
 on the *Screw Tug Allata* Tons _____
 Master _____ Built at *Deptford* When built *1881*
 Engines made at *Soho Birmingham* By whom made *J. Watt & Co* when made *1881*
 Boilers made at *Soho Birmingham* By whom made *J. Watt & Co* when made *1881*
 Registered Horse Power *35* Owners _____ Port belonging to _____

ENGINES, &c.—

Description of Engines *Inverted directacting compound surface condensing*
 Diameter of Cylinders *16" & 28"* Length of Stroke *18"* No. of Rev. per minute _____ Point of Cut off, High Pressure *1/6 to 1/8* Low Pressure *1/6 to 1/8*
 Diameter of Screw shaft *5"* Diameter of Tunnel shaft *5"* Diameter of Crank shaft journals *5 1/2"* Diameter of Crank pin *5 1/2"* size of Crank webs *7 x 4 1/2"*
 Diameter of screw *7 1/2"* Pitch of screw *10' 0"* No. of blades *3* state whether moveable *no* total surface _____
 No. of Feed pumps *one* diameter of ditto *1 1/4"* Stroke *18"* Can *it* be overhauled while the other is at work *yes*
 No. of Bilge pumps *one* diameter of ditto *1 1/4"* Stroke *18"* Can *it* be overhauled while the other is at work *yes*
 Where does *water* pump from *Engine room, fore and aft hold bilges.*
 No. of Donkey Engines *one* Size of Pumps *2 1/2"* Where does *water* pump from *Sea and bilges of engine room & fore and aft hold and from aft tank.*
 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*
 No. of bilge injections *one* and sizes *3 1/2"* Are they connected to condenser, or to circulating pump *circulating pump, which also pump out of aft tank*
 How are the pumps worked *by crosshead of High Press Cylinder, direct from Low Press Cylinder*
 Are all connections with the sea direct on the skin of the ship *Knapton tubes* Are they Valves or Cocks *Valves*
 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 *New.*
 Is the screw shaft tunnel watertight *yes* and fitted with a sluice door *no* worked from *A short tunnel draining into engine room.*

BOILERS, &c.—

Number of Boilers *one* Description *cylindrical return multitubular*
 Working Pressure *75 lbs* Tested by hydraulic pressure to *150 lb.* Date of test *9 Nov. 1881.* No 59
 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 *22 1/2 sq ft* Description of safety valves *Spring*
 No. to each boiler *two* area of each valve *7 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 _____
 Diameter of boilers *102* Length of boilers *8' 6"* description of riveting of shell long. seams *double riv butt circum. seams double riv lap.*
 Thickness of shell plates *5/8"* diameter of rivet holes *3/4"* whether punched or drilled *punched* pitch of rivets *2 1/2"*
 Lap of plating *3 7/8"* per centage of strength of longitudinal joint *70%* working pressure of shell by rules *44 lb.*
 Size of manholes in shell *12" x 15"* size of compensating rings *7 1/2" x 5/8"*
 No. of Furnaces in each boiler *two* outside diameter *30 7/8"* length, top *5' 6"* bottom *8' 0"*
 Thickness of plates *7/16"* description of joint *welded* if rings are fitted *yes* greatest length between rings *5' 0"*
 Working pressure of furnace by the rules *110 lb.*
 Combustion chamber plating, thickness, sides *1/2"* back *1/2"* top *1/2"*
 Pitch of stays to ditto sides *8 1/2"* back *8 1/2"* top *8 1/2"*
 If stays are fitted with nuts or riveted heads *rivet heads* working pressure of plating by rules *89 lb.*
 Diameter of stays at smallest part *1 1/4"* outside diam working pressure of ditto by rules *90 lb.*
 End plates in steam space, thickness *3/4"* in smoke box *1/2"* back pitch of stays to ditto *11" x 13"* how stays are secured *nuts & bars 2" x 5"*
 Working pressure by rules *78 lb.* diameter of stays at smallest part *1 1/2" & 1 3/4"* working pressure by rules *44 lb.*
 Front plates at bottom, thickness *3/4"* Back plates, thickness *1/2"* greatest pitch of stays *10"* working pressure by rules *44 lb.*

Diameter of tubes $3\frac{1}{2}$ " pitch of tubes $4\frac{1}{2}$ " thickness of tube plates, front $\frac{3}{16}$ " back $\frac{3}{16}$ "
How stayed Stay Tubes pitch of stays $13\frac{1}{2} \times 13\frac{1}{2}$ width of water spaces $5\frac{1}{2}$ "
Diameter of Superheater or Steam chest $30\frac{1}{2}$ " length $2' 6"$ height $2' 6"$ 40965 +
Thickness of plates $5/8"$ description of longitudinal joint welded diameter of rivet holes pitch of rivets
Working pressure of shell by rules ample 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 $5/8$ How stayed curved and one stay
Superheater or steam chest; how connected to boiler Flanged and riveted

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

The foregoing is a correct description,

Manufacturer.

James Watt & Co

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery and boiler were not examined during construction as no notice had been received till they were fixed in the vessel. The dimensions of the boiler and machinery are the same as those of the Screw Tug "London" engine by Messrs James Watt & Co and appear to be of good quality and workmanship and are in my opinion eligible to have the notification Lloyd's M.C. 11.8 recorded in the Register Book.

It is submitted that this vessel is eligible to have the notification Lloyd's M.C. recorded in the Register Book
M 8/12/81

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

Special .. £ 6 : 6 : -

Certificate (if required) .. £ 2 : 6 : 10/12/81

To be sent as per margin.

(Travelling Expenses, if any, £)

Committee's Minute 8th December 1881

Edward Lloyd's M.C.

C. E. Brown
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

1881

