

REPORT ON MACHINERY.

47997^a

Port of

Received at London Office

No.

No. in Survey held at London

Date, first Survey Sept. 27-87

Last Survey Jan. 13 1888

Reg. Book.

(Number of Visits 12)

on the

Steam Tug Hawk

Tons

Master

Built at

By whom built

When built

Engines made at

Blackwall. By whom made J. Stewart Son

when made 1888.

Boilers made at

Do. By whom made Do

when made 1888.

Registered Horse Power 33

Owners

Port belonging to

ENGINES, &c.—

Description of Engines Compound Inverted.

Diameter of Cylinders 13 1/2 + 29 Length of Stroke 18 No. of Rev. per minute 140 Point of Cut off, High Pressure 1/2 Low Pressure 1/2

Diameter of Screw shaft 5 Diam. of Tunnel shaft 4 3/4 Diam. of Crank shaft journals 5 Diam. of Crank pin 5 size of Crank webs 6 1/2 x 3 1/2

Diameter of screw 6ft. Pitch of screw 7ft 6in No. of blades 3 ~~state whether~~ not moveable total surface 15 sq. ft.

No. of Feed pumps 1 diameter of ditto 2 1/2 Stroke 8 Can one be overhauled while the other is at work

No. of Bilge pumps 1 diameter of ditto 3 Stroke 8 Can one be overhauled while the other is at work

Where do they pump from Engine Rm. Fore + aft Holds.

No. of Donkey Engines 1 Size of Pumps 2 dia. 4 stroke. Where do they pump from Eng. Rm. Fore + aft Holds.

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 1 and sizes 1 1/2 Are they connected to condenser, or to circulating pump Condenser.

How are the pumps worked By levers from S. I. Cross Head.

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

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

Is the screw shaft tunnel watertight and fitted with a sluice door corked from

BOILERS, &c.—

Number of Boilers One Description Multitubular. Whether Steel or Iron Steel. (S)

Working Pressure 100lbs. Tested by hydraulic pressure to 200lbs Date of test 9. 12. 87.

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 25 sq. ft. Description of safety valves Direct spring No. to each boiler 2

Area of each valve 4.9 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 6 Diameter of boilers 9 ft.

Length of boilers 9ft. 6in description of riveting of shell long. seams ribble lap circum. seams double lap Thickness of shell plates 11/16

Diameter of rivet holes 15/16 ~~whether punched or drilled~~ pitch of rivets 3 Lap of plating 6

Per centage of strength of longitudinal joint 69% working pressure of shell by rules 107 1/2 size of manholes in shell 16 x 12

Size of compensating rings 4 x 2 x 7 1/4 M. Keiler's Comptg. Ring. No. of Furnaces in each boiler 2

Outside diameter 2 7/8 length, top 6 9/16 bottom 8 1/8 thickness of plates 1/2 description of joint double butt strap if rings are fitted no

Greatest length between rings working pressure of furnace by the rules 103 lbs combustion chamber plating thickness, sides 1/2 back 1/2 top 1/2

Pitch of stays to ditto, sides 8 back 7 1/2 top 7 1/2 If stays are fitted with nuts or riveted heads nuts working pressure of plating by

rules 120 lbs. Diameter of stays at smallest part 1 5/8 working pressure of ditto by rules 185 1/2 end plates in steam space, thickness 3/4

Pitch of stays to ditto 18 x 15 how stays are secured double nut & wire wash working pressure by rules 110 lbs diameter of stays at

smallest part 2 1/4 working pressure by rules 115 lbs Front plates at bottom, thickness 11/16 Back plates, thickness 5/8

Greatest pitch of stays 11 working pressure by rules 90 lbs. Diameter of tubes 3 1/2 pitch of tubes 4 3/4 thickness of tube

plates, front 11/16 back 5/8 how stayed St. tubes pitch of stays 9 1/2 width of water spaces 6

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

Form No. 8-3000-17/2/56-1. A.S. Transfer Ink.

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 boiler _____
 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 foregoing is a correct description,

John Stewart & Son Manufacturer.

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

+ Boilers
 These Engines were built under Special Survey. Material & Workmanship good, & eligible in my opinion to be marked in the Register Book with **LMC 1.88**

It is submitted that this vessel is eligible to have the notification + LMC 1.88 entered in the Register Book.

AJ
 17.1.88

Large blue handwritten signature

The amount of Entry Fee .. £ / : : £ 5.5/- received by me, 8. Sept. 1887
 Special £ 8 : - : £ 3.15/- } E.M.
 Donkey Boiler Fee £ : :
 Certificate (if required) .. £ : : 19/1 1888
To be sent as per margin.
 (Travelling Expenses, if any, £)

Geo. P. Wilkeson 2019
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

+ LMC 1/88

