

REPORT ON MACHINERY.

No. 3919

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No. in Survey held at *Aberdeen*

Date, first Survey *May 1883* Last Survey *10 Nov 1888*

Reg. Book.

(Number of Visits ☒)

on the *Iron S. S. Adolf Deppe*

Tons

Master *Kersting* Built at *Aberdeen* By whom built *J. Duthie & Sons & Co.* When built *1888*

Engines made at *Aberdeen* By whom made *Hall Russell & Co.* when made *1888*

Boilers made at *D* By whom made *D* when made *1888*

Registered Horse Power Owners *Adolf Deppe* Port belonging to *Antwerp*

ENGINES, &c.—

Description of Engines *Inverted Compound Direct Acting, Surface Condensing*
 Diameter of Cylinders *25 x 48* Length of Stroke *33* No. of Rev. per minute *65* Point of Cut off, High Pressure *17 1/2* Low Pressure *17 1/2*
 Diameter of Screw shaft *8 3/4* Diam. of Tunnel shaft *8 3/4* Diam. of Crank shaft journals *9 1/4* Diam. of Crank pin *9 1/4* size of Crank webs *11 x 6 1/2*
 Diameter of screw *12 - 9* Pitch of screw *15 - 6* No. of blades *4* state whether moveable *No* total surface *53 sq ft*
 No. of Feed pumps *2* diameter of ditto *3* Stroke *18* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *2* diameter of ditto *3* Stroke *18* Can one be overhauled while the other is at work *Yes*
 Where do they pump from *all compartments*
 No. of Donkey Engines *two* Size of Pumps *3 1/2 D x 8 1/2 x 8 1/2 x 10 1/2* Where do they pump from *hulk. Sea. hotwell & all bilges*
 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 *3 1/2* Are they connected to condenser, or to circulating pump *Circ Pump*
 How are the pumps worked *lever over condenser*
 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 *while building*
 Is the screw shaft tunnel watertight *Yes* and fitted with a sluice door *Yes* worked from *top platform*

BOILERS, &c.—

Number of Boilers *One* Description *Cylindrical* Whether Steel or Iron *Steel*
 Working Pressure *100* Tested by hydraulic pressure to *200* Date of test *30-12-84-*
 Description of superheating apparatus or steam chest *horizontal 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 *50 0* Description of safety valves *Spring* No. to each boiler *two*
 Area of each valve *14 0* 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 *9* Diameter of boilers *13-6*
 Length of boilers *10-0* description of riveting of shell long. seams *double shap* circum. seams *double lap* Thickness of shell plates *7/8*
 Diameter of rivet holes *1 1/16* whether punched or drilled *drilled* pitch of rivets *4 1/4* Lap of plating *1 1/2 Shap.*
 Percentage of strength of longitudinal joint *72* working pressure of shell by rules *100* size of manholes in shell *16 x 11 1/2*
 Size of compensating rings *5 x 3 1/2 x 3 1/4 angle* No. of Furnaces in each boiler *three*
 Outside diameter *3-4* length, top *6-6* bottom *9-0* thickness of plates *9/16* description of joint *double shap* if rings are fitted *half*
 Greatest length between rings *6-3* working pressure of furnace by the rules *109* combustion chamber plating, thickness, sides *1/2* back *1/2* top *1/2*
 Pitch of stays to ditto, sides *8 3/4* back *8 3/4* top *Circ* If stays are fitted with nuts or riveted heads *nut* working pressure of plating by rules *101* Diameter of stays at smallest part *1 1/8* working pressure of ditto by rules *103* end plates in steam space, thickness *13/16*
 Pitch of stays to ditto *16* how stays are secured *nut & washer* working pressure by rules *105* diameter of stays at smallest part *2 3/8* working pressure by rules *124* Front plates at bottom, thickness *3/4* Back plates, thickness *13/16*
 Greatest pitch of stays *as per plan* working pressure by rules *100* Diameter of tubes *3 1/2* pitch of tubes *4 3/4* thickness of tube plates, front *25/32* back *11/16* how stayed *lugs* pitch of stays *9 1/2* width of water spaces
 Diameter of Superheater or Steam chest *3-0* length *6-6* thickness of plates *1/2* description of longitudinal joint *d lap* diam. of rivet holes *13/16*
 Pitch of rivets *2 9/16* working pressure of shell by rules *206* 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 *3/4* how stayed *dished*
 Superheater or steam chest; how connected to boiler *Contracted neck*

3919 Abn

DONKEY BOILER— Description Vertical x tube. Steel.

Made at Abdeen by whom made Hall Russell & Co when made ; where fixed Stokehole
 Working pressure 80 tested by hydraulic pressure to 160 No. of Certificate 459 fire grate area 12½ ft description of safety
 valves Spring No. of safety valves 2 area of each 70 if fitted with easing gear yes if steam from main boilers can
 enter the donkey boiler no diameter of donkey boiler 4-9" length 10-6" description of riveting d lap
 Thickness of shell plates ¼" diameter of rivet holes ¾" whether punched or drilled ½" pitch of rivets 2¾" lap of plating 4
 per centage of strength of joint 72 thickness of crown plates 9/16 stayed by uptake & 12 stays
 Diameter of furnace, top 3-6" bottom 4-3" length of furnace 5-6" thickness of plates ¼" description of joint single lap
 Thickness of furnace crown plates 9/16 stayed by as above working pressure of shell by rules 136
 Working pressure of furnace by rules 80 diameter of uptake 1½" thickness of plates ¼" thickness of water tubes 5/16"

SPARE GEAR. State the articles supplied:—

Propeller. Sail shaft. Two top end,
two bottom end, two main bearing & one set coupling both
set of feed & bilge pump. Valves assorted both & nut. & a few
bars of iron, & set of spare springs

The foregoing is a correct description,

Hall Russell & Co. Manufacturer.

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

The Machinery of this vessel has been built under special
survey. the material & workmanship is good.
This vessel is eligible in our opinion to have + I.M.C.
Recorded

It is submitted that this
vessel is eligible to have
+ I.M.C. 11.88 recorded

ALD

12.11.88

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

.. Special .. £ 14 : 14 : -

Donkey Boiler Fee .. £ : : -

Certificate (if required) .. £ : : -

To be sent as per margin.

(Travelling Expenses, if any, £)

Committee's Minute

TUES 13 NOV 1888

+ I.M.C. 11/88John H Heck
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.