

# REPORT ON MACHINERY.

886

(Received at London Office Rec'd 12th April, 1884)

No. 86B

Survey held at Ascarshamn

Date, first Survey 3<sup>rd</sup> May 1883 Last Survey 25<sup>th</sup> Feb 1884

Book.

(Number of Visits)

on the S/S Victoria

Tons 760/587

Master Julius Svendsen Built at Ascarshamn When built 1883-84

Engines made at Ascarshamn By whom made Gustaf Tillberg when made 1883-84

Boilers made at d<sup>to</sup> By whom made d<sup>to</sup> when made d<sup>to</sup>

Registered Horse Power 100 Owners Jnton Larsen Naur Port belonging to Kragerø

## ENGINES, &c.—

Description of Engines Compound with surface condenser

Diameter of Cylinders 22 1/2 x 42 Length of Stroke 28 No. of Rev. per minute 80 Point of Cut off, High Pressure 0.5 Low Pressure 0.5

Diameter of Screw shaft 7 1/2 Diameter of Tunnel shaft 7 1/2 Diameter of Crank shaft journals 7 1/2 Diameter of Crank pin 7 1/2 size of Crank webs 10 x 5

Diameter of screw 10-9 Pitch of screw 12 No. of blades 4 state whether moveable No total surface 115 sq ft

No. of Feed pumps 2 diameter of ditto 3 Stroke 17 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 1 diameter of ditto 3 Stroke 17 Can one be overhauled while the other is at work Yes

Where do they pump from each compartment

No. of Donkey Engines 2 Size of Pumps 5 x 8 5 1/2 x 2 1/4 Where do they pump from the larger from water tanks and

each compartment, the smaller for feeding boiler and pumping to 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 Yes

No. of bilge injections 1 and sizes 6 1/2 Are they connected to condenser, or to circulating pump to circulating pump

How are the pumps worked by levels from the main engine

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves and Cocks

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 1884

Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Main deck

## BOILERS, &c.—

Number of Boilers 1 Description Horizontal Multitubular

Working Pressure 75 lbs Tested by hydraulic pressure to 150 lbs Date of test 4<sup>th</sup> February 1884

Description of superheating apparatus or steam chest Cylindrical

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 sq ft Description of safety valves Spring Patent Spring

No. to each boiler 2 area of each valve 33.18 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 4"

Diameter of boilers 18'-2" Length of boilers 10'-9" description of riveting of shell long. seams double butt straps circum. seams double laps

Thickness of shell plates 1 3/16 diameter of rivet holes 7/8 whether punched or drilled drilled pitch of rivets 2 1/4

Working pressure of plating 5 1/4 per centage of strength of longitudinal joint 62 working pressure of shell by rules 79

Size of manholes in shell 16" x 10" size of compensating rings 3 1/2 x 1"

No. of Furnaces in each boiler 3 outside diameter 32" length, top 8" bottom 10"

Thickness of plates 7/2 description of joint Single Lap if rings are fitted Yes greatest length between rings 3'-4

Working pressure of furnace by the rules 211 lbs

Combustion chamber plating, thickness, sides 9/16 back 9/16 top 9/16

Pitch of stays to ditto, sides 9/2 back 9/2 top 9/2

If stays are fitted with nuts or riveted heads riveted heads working pressure of plating by rules 81 lbs

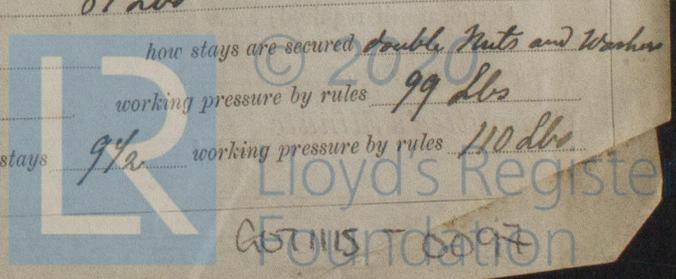
Working pressure of ditto by rules 81 lbs

Shipping diameter of stays at smallest part 1 1/4 working pressure of ditto by rules 81 lbs

End plates in steam space, thickness 5/8 pitch of stays to ditto 5/8 how stays are secured double Nuts and Washers

Working pressure by rules 82 lbs diameter of stays at smallest part 2 1/4 working pressure by rules 99 lbs

Front plates at bottom, thickness 5/8 Back plates, thickness 5/8 greatest pitch of stays 9/2 working pressure by rules 110 lbs



Diameter of tubes  $3\frac{1}{2}$  pitch of tubes  $4\frac{7}{8}$  thickness of tube plates, front  $\frac{1}{16}$  back  $\frac{1}{16}$   
 How stayed *Stay tubes* pitch of stays  $14\frac{1}{8}$  width of water spaces  $1\frac{3}{8}$   
 Diameter of Superheater or Steam chest  $4'-6"$  length  $4'-6"$   
 Thickness of plates  $\frac{3}{16}$  description of longitudinal joint *Single Lap joint* diameter of rivet holes  $\frac{7}{8}$  pitch of rivets  $2"$   
 Working pressure of shell by rules  $97\text{ lbs}$  Diameter of flue — thickness of plates —  
 If stiffened with rings — distance between rings — Working pressure by rules —  
 End plates of ~~superheater~~ steam chest; thickness  $\frac{5}{8}$  How stayed *4 pieces  $1\frac{3}{4}$ " stays*  
 Superheater or steam chest; how connected to boiler *riveted*

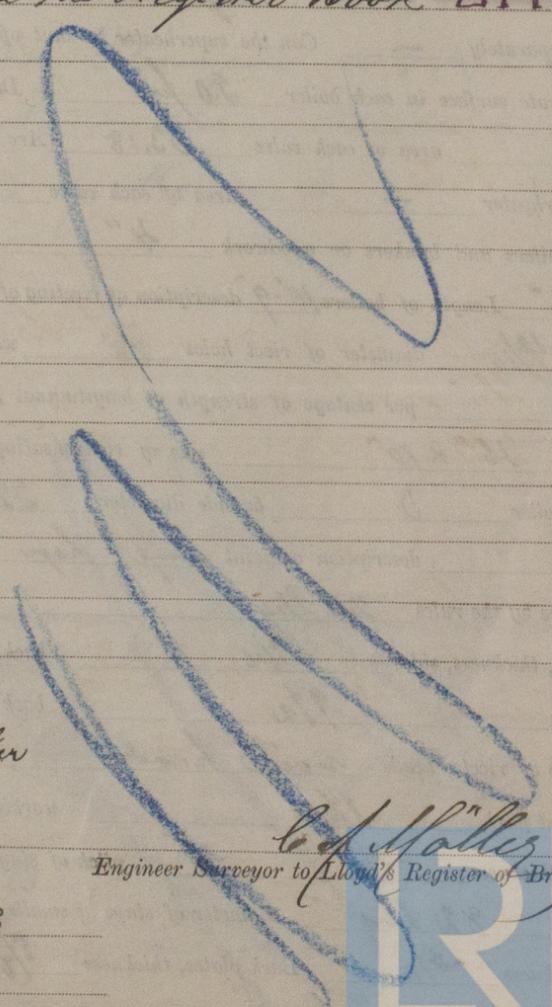
**DONKEY BOILER**— Description *Vertical with Galloway tubes*  
 Made at *Oscarohamn* By whom made *Gustaf Tillberg* when made *1884*  
 Where fixed *in Engine room* working pressure  $70\text{ lbs}$  Tested by hydraulic pressure to  $150\text{ lbs}$  No. of Certificate  
 Fire grate area  $13\text{ sq. ft.}$  Description of safety valves *Common* No. of safety valves  $2$  area of each  $4.9$   
 If fitted with easing gear *No* If steam from main boilers can enter the donkey boiler *Yes*  
 Diameter of donkey boiler  $4'-5"$  length  $8'$  description of riveting *Single Lap joint*  
 thickness of shell plates  $\frac{7}{16}$  diameter of rivet holes  $\frac{7}{8}$  whether punched or drilled *punched*  
 pitch of rivets  $2"$  lap of plating  $2\frac{3}{4}$  per centage of strength of joint  $56$   
 thickness of crown plates  $\frac{1}{2}$  stayed by *the Uptake and 4 pieces  $1\frac{1}{2}$ " stays*  
 Diameter of furnace, top  $4'$  bottom  $4'$  length of furnace  $4'-7"$   
 thickness of plates  $\frac{7}{16}$  description of joint *Single Lap joint*  
 thickness of furnace crown plates  $\frac{1}{2}$  stayed by *the Uptake and 4 pieces  $1\frac{1}{2}$ " stays*  
 Working pressure of shell by rules  $72\text{ lbs}$  working pressure of furnace by rules  $77\text{ lbs}$   
 diameter of uptake  $12"$  thickness of plates  $\frac{9}{16}$  thickness of water tubes  $\frac{5}{16}$

The foregoing is a correct description,  
 Manufacturer.

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

The machinery is of a good construction and the quality of the materials and workmanship good.  
 The engines and boilers are examined by me from the commencement of the work until the final test of the machinery under steam and found to be at this date viz 25<sup>th</sup> February 1884 in good order and safe working condition and in my opinion merits the favorable consideration of the Committee to be notified in the Register Book L.M.C.

*It is submitted that this vessel is eligible to have the notification & L.M.C. recorded*  
*M 15/4/84*



The amount of Entry Fee £ 2 : : received by me,  
 Special .. .. £ 15 : :  
 Certificate (if required) .. £ : 2 : 6 April 5 1884  
To be sent as per margin.  
 (Travelling Expenses, if any, £ )

C. P. Waller  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUESDAY 15 APRIL 1884 18

