

## REPORT ON MACHINERY.

Port of *Glasgow*

FRI. 14 APR 1899

Received at London Office

No. in Survey held at  
Reg. Book.

Date, first Survey

Last Survey

18

(Number of Visits)

on the

S. S.

"DORSET"

Tons } Gross  
Net

Master

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted

Is Electric Light fitted

## ENGINES, &amp;c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. of stern bush  
 Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under collars  
 Dia. of screw Pitch of screw No. of blades State whether moveable Total surface  
 No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
 No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room In Holds, &c.  
 No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size  
 Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible  
 Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line  
 Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate  
 What pipes are carried through the bunkers How are they protected  
 Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times  
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges  
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight  
 Is it fitted with a watertight door worked from

## BOILERS, &amp;c.—

(Letter for record)

Total Heating Surface of Boilers

Is forced draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of safety valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are they welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of Stays in each

Working pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

GLS183-0276



16884 Gls

DONKEY BOILER— No. *One* Description *Single ended, multitubular, 2 Plain furnaces.*  
Made at *Stockton* By whom made *Riley Bros* When made *11/1/99* Where fixed *on deck.*  
Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *1868* Fire grate area *25* Description of safety valves *Patent Chrin*  
No. of safety valves *2* Area of each *3.976* Pressure to which they are adjusted *✓* If fitted with easing gear *✓* If steam from main boilers can  
enter the donkey boiler *no* Dia. of donkey boiler *8.6* Length *8.0* Material of shell plates *steel* Thickness *1/2* Range of tensile  
strength *27-32* Descrip. of riveting long. seams *treble rivetted lap* Dia. of rivet holes *13/16* Whether punched or drilled *p + rim* Pitch of rivets *3 1/4*  
Lap of plating *6* Per centage of strength of joint Rivets *81* Thickness of shell *and* plates *22/32* Radius of do. *16 1/4* No. of Stays to do. *16 1/4*  
Dia. of stays *2 1/2* Dia. of furnace *Top 30* Bottom *C.C. 1/2* Length of furnace *5.4 1/2* Thickness of furnace plates *7/16* Description of  
joint *welded* Thickness of furnace *C. Chamber* plates *15/32* Stayed by *S. stays 1 1/8* eff. *8 to 9* pitch Working pressure of shell by rules *86 lbs.*  
Working pressure of furnace by rules *80 lbs* Diameter of *tube* uptake *3* Thickness of *tube* uptake plates *23/32* *1/8* Thickness of *stay* tubes *5/16*

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,

Manufacturer.

Dates { During progress of  
of Survey { work in shops - -  
while { During erection on  
building { board vessel - -  
Total No. of visits

Is the approved plan of main boiler forwarded herewith

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

*retained at Stockton for duplicate*  
This boiler has been placed on board, the fixing & staying  
of same requires to be examined, & the safety valve easing  
gear fixed. the safety valves also require to be tested  
& adjusted under steam.

It is submitted that  
this vessel is eligible to  
remain as CLASSED. subject to  
New Donkey Boiler being securely fixed  
in position and Safety valves adjusted  
under steam, and is eligible for *14.4.99* Subject to above  
*A.C.H.*

*N.D.B. 99 working pressure 80 lbs to be noted*

Certificate (if required) to be sent to

The amount of Entry Fee..	£	:	:	When applied for,
Special .. .. .	£	:	:	.....18.....
Donkey Boiler Fee .. .. .	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	.....18.....

Committee's Minute

Assigned

TUES. 18 APR 1899

FRI. 21 APR 1899

*J.W. Dunsmock*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Lloyd's Register  
Foundation