

REPORT ON MACHINERY.

3402

No. 3402

Port of Belfast

MONDAY 20 FEB 1888

No. in Survey held at Belfast

Date, first Survey

Last Survey

18

Reg. Book.

in Sup. on the

S.S. "Oceana"

(Number of Visits)

Tons

Master E. N. Hector

Built at

Belfast

By whom built

Harland & Wolff

When built 1887/8

Engines made at

Belfast

By whom made

Harland & Wolff

when made 1887/8

Boilers made at

Belfast

By whom made

Harland & Wolff

when made 1887/8

Registered Horse Power

Owners Peninsular & Oriental S.N. Co. Port belonging to

ENGINES, &c.—

Description of Engines

Diameter of Cylinders

Length of Stroke

No. of Rev. per minute

Point of Cut off, High Pressure

Low Pressure

Diameter of Screw shaft

Diam. of Tunnel shaft

Diam. of Crank shaft journals

Diam. of Crank pin

size of Crank webs

Diameter 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

Where do they pump from

No. of Donkey Engines

Size of Pumps

Where do they pump from

Are all the bilge suction pipes fitted with roses

Are the roses always accessible

Are the sluices on Engine room bulkheads always accessible

No. of bilge injections

and sizes

Are they connected to condenser, or to circulating pump

How are the pumps worked

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 accessible at all times

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection 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

and fitted with a sluice door

worked from

BOILERS, &c.—

Number of Boilers

2

Description

Cylindrical Multitubular

Whether Steel or Iron

Steel

Working Pressure

150 lbs.

Tested by hydraulic pressure to

300 lbs.

Date of test

21st Oct. + 10th Nov. 1887

Description of superheating apparatus or steam chest

None fitted

Can each boiler be worked separately

Yes

Can the superheater be shut off and the boiler worked separately

Yes

Area of square feet of fire grate surface in each boiler

115.5

Description of safety valves

See Cockburn's

No. to each boiler

Two

Area of each valve

14.18 sq. in.

Are they fitted with easing gear

yes

No. of safety valves to superheater

2

area of each valve

✓

Are they fitted with easing gear

✓

Smallest distance between boilers and bunkers or woodwork

✓

Diameter of boilers

14'-8"

Length of boilers

17'-10"

description of riveting of shell long. seams

366 riv. double strapped

circum. seams

Lapped

366 riv. double

Thickness of shell plates

1 1/4"

Diameter of rivet holes

1 3/8"

whether punched or drilled

drilled

pitch of rivets

8.28

Lap of plating

Straps 20" x 1 1/2"

Percentage of strength of longitudinal joint

83 plate

working pressure of shell by rules

153 lbs.

size of manholes in shell

12" x 16"

No. of compensating rings

McNeill's pt.

section

Majority of plates 1/2" thick

No. of Furnaces in each boiler

Six

Inside diameter

14'2" + 14'1 1/2"

length, top

7'-0"

bottom

8'-10"

thickness of plates

1 1/2"

description of joint

Welded

See Pt. if rings are fitted

Greatest length between rings

working pressure of furnace by the rules

150

combustion chamber plating, thickness, sides

9/16"

back

✓

top

5/8"

Each of stays to ditto, sides

8" x 8"

back

✓

top

8 1/2" x 8"

If stays are fitted with nuts or riveted heads

riveted through

slip

working pressure of plating by

rules

152

Diameter of stays at smallest part

1 3/8"

Each of stays to ditto

10 3/4" + 18" + 16 3/4"

how stays are secured

double nuts and washers

working pressure by rules

160 lbs. with 160

diameter of stays at

smallest part

2 3/4" steel + 3 1/2" iron

working pressure by rules

165 lbs.

Front plates at bottom, thickness

1 3/8"

Back plates, thickness

✓

Greatest pitch of stays

working pressure by rules

✓

Diameter of tubes

3 1/2" - 7.125"

pitch of tubes

4 3/4" x 4 3/4"

thickness of tube

1 1/4"

how stayed

Stay tubes

pitch of stays

9 1/2" x 9 1/2"

Diameter of Superheater or Steam chest

✓

length

✓

thickness of plates

✓

description of longitudinal joint

✓

diam. of rivet holes

✓

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

✓

James Claxton

Surveyor

✓

✓

✓

✓

✓

✓

✓

Diameter of rivets

✓

working pressure of shell by rules

✓

diameter of flue

✓

thickness of plates

✓

If stiffened with rings

✓

working pressure by rules

✓

end plates of superheater, or steam chest; thickness

✓

how stayed

✓

Superheater or steam chest; how connected to boiler

✓

✓

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

✓

✓

✓

✓

✓

✓

✓

✓

✓

REPORT ON MACHINERY

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 _____

SPARE GEAR. State the articles supplied : 

The foregoing is a correct description,

Manufacturer.

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

The amount of Entry Fee . . . £ : : received by me,
Special £ : :
Donkey Boiler Fee £ : :
Certificate (if required) . . . £ : : 18
To be sent as per margin.

(Travelling Expenses, if any, £ _____)

Committee's Minute

FRIDAY 21 FEB 1888

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



Lloyd's Register
Foundation