

## REPORT ON BOILERS.

No. 4345

Port of

MIDDLESBROUGH-ON-TEES.

Received at London Office

1905 DEC 18

No. in Survey held at

Stockton

Date, first Survey

28<sup>th</sup> August

Last Survey

18<sup>th</sup> Dec

1905

Reg. Book.

Supp on the Donkey Boiler (No 3572) for S. S. "Irene".

Master

J. M. B.

Engines made at

Sunderland

By whom made

North Eastern Marine Eng Co. Ltd

Boilers made at

Stockton

By whom made

Riley Bros Ltd

when made

1905

Registered Horse Power

Owners

Port belonging to

Trieste

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

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
No. of Certificate	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	In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler	Mean dia. of boilers	Length
Smallest distance between boilers or uptakes and bunkers or woodwork	Material of shell plates	Thickness	Range of tensile strength
Material of shell plates	Thickenss	Range of tensile strength	Are the shell plates 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	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
Description of longitudinal joint	No. of strengthening rings	Working pressure of furnace by the rules	Combustion chamber
plates: Material	Thickness: Sides	Back	Top
Top	If stays are fitted with nuts or riveted heads	Working pressure by rules	Material of stays
smallest part	Area supported by each stay	Working pressure by rules	End plates in steam space: Material
Pitch of stays	How are stays secured	Working pressure by rules	Material of stays
Area supported by each stay	Working pressure by rules	Material of Front plates at bottom	Thickness
Lower back plate	Thickness	Greatest pitch of stays	Working pressure of plate by rules
Pitch of tubes	Material of tube plates	Thickness: Front	Back
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
holes	Pitch of rivets	Working pressure of shell by rules	Diameter of flue
If stiffened with rings	Distance between rings	Working pressure by rules	End plates: Thickness
Working pressure of end plates	Area of safety valves to superheater	Are they fitted with easing gear	

## VERTICAL DONKEY BOILER—

No. One

Description

Meredith's Patent

Manufacturers of steel J. Spencer &amp; Sons Ltd

Made at Stockton

By whom made

Riley Bros (Boilermakers) Ltd

When made

11.11.05

Where fixed

Stokehold

Working pressure 100 lb tested by hydraulic pressure to 200 lb

No. of Certificate

3550

Fire grate area

27 sq ft

Description of safety valves

direct spring

No. of safety valves

2

Area of each

4.91 sq ft

Pressure to which they are adjusted

100 lb

If fitted with easing gear

yes

If steam from main boilers can

enter the donkey boiler

no

Dia. of donkey boiler

7'-0"

Length

15'-6"

Material of shell plates

Steel

Thickness

3/32"

strength

2 1/32

Descrip. of riveting long. seams

DR lap

Dia. of rivet holes

1 5/16"

Whether punched or drilled

punched

Pitch of rivets

3 1/8"

Lap of plating

4 3/4"

Per centage of strength of joint

Rivets 70

Plates 69.9

Working pressure of shell by rules

105.5

Thickness of shell crown plates

3/32"

Radius of do.

3'-6"

No. of Stays to do.

✓

Dia. of stays

✓

Diameter of furnace Top

4'-9"

Bottom

6'-1"

Thickness of furnace plates

1/16"

Description of joint

SR lap

Working pressure of furnace by rules

120 lb

Thickness of furnace crown

plates

2 1/32"

Stayed by

plates

2 1/32"

Stayed by

dished 3'-0" rad

Diameter of uptake

3 1/4"

Thickness of uptake plates

5/8"

Thickness of water tubes

5/16"

The foregoing is a correct description.

Manufacturer.

1905 August 20. October 14. November 2. 3. 4. 11

Dec. 8. 11. 13. 18

Is the approved plan of main boiler forwarded herewith

" donkey "

Lloyd's Register  
Whob Foundation



GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been built under Special Survey.  
The materials and workmanship are good and efficient.  
After satisfactorily withstanding the hydraulic test it has  
been fitted and secured on board and the safety valves  
adjusted under steam.

Certificate (if required) to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for,
Special ... ..	£	:	:	5.12.1905
Donkey Boiler Fee ...	£	2	2	When received,
Travelling Expenses (if any) £	:	:	:	7.12.1905

RWD

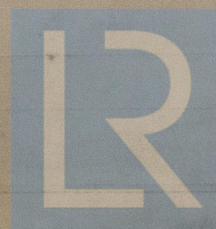
R. D. Shilston

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

Committee's Minute

FRI. 29 DEC 1905

Assigned



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Foundation