

pt. 5. Sunderland.

REPORT ON BOILERS.

Inve. No. 51793. Sd. No. 23042

Port of Newcastle

Received at London Office TUES NOV 20 1906

No. in Survey held at Gateshead

Date, first Survey Dec 13 '05

Last Survey Oct 25 1906

Reg. Book.

(Number of Visits 47)

on the

S.S. "Cannistbrook"

Tons } Gross 2825.22
Net

Master A. Wallace Built at Sunderland By whom built J. Blunnie & Co When built 1906

Engines made at Sunderland By whom made Messrs J. Dickinson & Sons when made 1906

Boilers made at Gateshead By whom made Clarke Chapman & Co No. 2555 when made 1906

Registered Horse Power Owners Brook Steamship Co. Ltd. Port belonging to Glasgow.

MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel J. Spence & Sons

Letter for record S) Total Heating Surface of Boilers 555 sq Is forced draft fitted No. and Description of

Boilers One — single-ended Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 25/10/06

No. of Certificate 7349 Can each boiler be worked separately Area of fire grate in each boiler 24 sq No. and Description of

safety valves to each boiler 2, Spring Patent Area of each valve 7.07 sq Pressure to which they are adjusted 80 lbs

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 15" Mean dia. of boilers 9'-0" Length 8'-6"

Material of shell plates Steel Thickness 17/32 Range of tensile strength 27-32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams S. Lap long. seams S. Lap Diameter of rivet holes in long. seams 1" Pitch of rivets 3 1/2"

Lap of plates or width of butt straps 4 7/8" Per centages of strength of longitudinal joint rivets 72-2 Working pressure of shell by

rules 83 lbs Size of manhole in shell 16" x 12" Size of compensating ring 6" x 17/32" No. and Description of Furnaces in each

boiler 2 — plain Material Steel Outside diameter 2'-9" Length of plain part top 64" Thickness of plates crown 1/2" bottom 6 1/2" bottom 1/2"

Description of longitudinal joint S. Lap No. of strengthening rings Working pressure of furnace by the rules 118 lbs Combustion chamber

plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 9/16" Pitch of stays to ditto: Sides 11" x 10" Back 11" x 9 1/2"

Top 13" x 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 85 lbs Material of stays Steel Diameter at

smallest part 1 3/8" Area supported by each stay 110 sq Working pressure by rules 80 lbs End plates in steam space: Material Steel Thickness 1/16"

Pitch of stays 17" x 15 1/2" How are stays secured S. N. W Working pressure by rules 85 lbs Material of stays Steel Diameter at smallest part 2 1/4"

Area supported by each stay 259 sq Working pressure by rules 114 lbs Material of Front plates at bottom Steel Thickness 1/16" Material of

Lower back plate Steel Thickness 1/16" Greatest pitch of stays 12" Working pressure of plate by rules 123 lbs Diameter of tubes 3"

Pitch of tubes 4 1/4" x 4 1/4" Material of tube plates Steel Thickness: Front 1/16" Back 5/8" Mean pitch of stays 12 3/4" Pitch across wide

water spaces 13" Working pressures by rules 85 lbs Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 7" x 1 1/8" Length as per rule 24" Distance apart 13" Number and pitch of Stays in each 1-11"

Working pressure by rules 97 lbs Superheater or Steam chest; how connected to boiler None 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

VERTICAL DONKEY BOILER — No. Description Manufacturers of steel

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 Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can

enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile

strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Plates Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown

plates Stayed by Diameter of uptake Thickness of uptake plates Thickness of water tubes

FOR CLARKE, CHAPMAN & CO. LTD.,

Manufacturer.

Dates of Survey while building 1905 Dec 13, 05, Apr 4, June 21, Aug 07, 31, Sep 07, Oct 25

During progress of work on slips
During erection on board vessel
Total No. of visits 7

CHAIRMAN

Is the approved plan of main boiler forwarded herewith

donkey

Lloyd's Register Foundation

W898-0020

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

This donkey boiler has been constructed under special survey & the materials & workmanship are found to be good. It has been satisfactorily fitted on board & mounted, & the safety valves adjusted under steam.

RETAIN

RETAIN

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 | £ | : | : | monies When received, Account |
| Donkey Boiler Fee ... | £ | 2 | 2 | |
| Travelling Expenses (if any) £ | : | : | : | |

Thomas Field & Co. Coomber
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute
Assigned
FRI, NOV 23 1906