Rpt. 5.

REPORT ON BOILERS.

No. 50000

Port of Newcastle

Received at London Office WED. 31 JAN 1906 19

No. in Reg. Book. Survey held at Newcastle Date, first Survey ✓ Last Survey Jan 07 1906 (Number of Visits ✓)

on the S. S. "Hymettus" Tons { Gross 4806 Net 2985

Master C. McDonald Built at Newcastle By whom built Palmers' Co When built 1906

Engines made at Newcastle By whom made Palmers' Co when made 1906

Boilers made at do By whom made do when made 1906

Registered Horse Power ~~539~~ Owners A Currie & Co Port belonging to Melbourne

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MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR DONKEY~~ Auxiliary.—Manufacturers of Steel J. Spence & Sons (Letter for record S) **Total Heating Surface of Boilers** 1236 ☐ Is forced draft fitted no **No. and Description of Boilers** One single-ended **Working Pressure** 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 24/11/05 No. of Certificate 7124 Can each boiler be worked separately ✓ **Area of fire grate in each boiler** 34 ☐ No. and Description of safety valves to each boiler Two - spring Area of each valve 3·9 □" Pressure to which they are adjusted 180 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 11'-7 1/32" Length 10'-0" Material of shell plates Steel Thickness 1 1/32" Range of tensile strength 29-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D. Lap long. seams D.B.S.D. Rivd Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6 3/4" ~~Lap of plates or~~ width of butt straps 15 1/2" Per centages of strength of longitudinal joint rivets 94 plate 84·2 Working pressure of shell by rules 197 lbs Size of manhole in shell 16"×12" Size of compensating ring 2'-7"×2'-3"×1 1/16" **No. and Description of Furnaces in each boiler** 2 - Deightons Material Steel Outside diameter 3'-5 1/4" Length of plain part top ✓ bottom ✓ Thickness of plates crown bottom 17/32" Description of longitudinal joint Welded No. of strengthening rings ✓ Working pressure of furnace by the rules 198 lbs Combustion chamber plates: Material Steel Thickness: Sides 21/32" Back 21/32" Top 21/32" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/8"×8 1/2" Back 8 3/4"×8 3/8" Top 10 3/4×7 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 180 lbs Material of stays Steel ~~Diameter~~ area at smallest part 1·79 □" Area supported by each stay 81 □" Working pressure by rules 200 lbs End plates in steam space: Material Steel Thickness 1 1/8" Pitch of stays 17 3/4"×15 1/2" How are stays secured D.N.W Working pressure by rules 216 lbs Material of stays Steel ~~Diameter~~ area at smallest part 4·77 □" Area supported by each stay 275 □" Working pressure by rules 180 lbs Material of Front plates at bottom Steel Thickness 1 3/32" Material of Lower back plate Steel Thickness 1 3/32" Greatest pitch of stays 14" Working pressure of plate by rules 300 lbs Diameter of tubes 3 1/4" Pitch of tubes 4 1/2"×4 1/2" Material of tube plates Steel Thickness: Front 1 3/32 Back 27/32" Mean pitch of stays 9" Pitch across wide water spaces 14" Working pressures by rules 316 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 3/4"×1 1/2" Length as per rule 26" Distance apart 10 3/4" Number and pitch of Stays in each 2-7 1/2" Working pressure by rules 220 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

The foregoing is a correct description,

Manufacturer.

Please see report attached.

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

Is the approved plan of main boiler forwarded herewith yes

" " " ~~donkey~~ auxiliary " " yes

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

The amount of Entry Fee...	£	:	:	When applied for, 30 JAN 1906 19
Special	£	:	:	
Donkey Boiler Fee ...	£ 2	: 2	:	When received, 19
Travelling Expenses (if any))	£	:	:	

Thomas Field

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

Committee's Minute FRI. 2 FEB 1906

Assigned

Certificate (if required) to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.