

REPORT ON BOILERS.

No. 5365

Received at London Office

SAT. 1 FEB 1908

of writing Report 19 When handed in at Local Office 19 Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Stockton Date, First Survey 24.12.07 Last Survey Hull, Apr 27th 1908

g. Book. 8 Supp on the Boiler (N. 328) for Mep. Cook Welton & Gemmell's/s No 161. (Number of Visits) Gross 119 Tons Net 6.51

ter Built at Berkeley By whom built Cook Welton & Gemmell When built 1908

ines made at Luton By whom made Tauschall & Best Hydraulic Eng. Co. when made 1908

ers made at Stockton By whom made Tolain & Co. Ltd when made 1908

stered Horse Power Owners J. Gray & Co., Ltd Port belonging to Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Son Ltd

ter for record S Total Heating Surface of Boilers 1306 A Is forced draft fitted No No. and Description of Boilers One Cyl Tubular Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 22-1-08

of Certificate 4083 Can each boiler be worked separately ✓ Area of fire grate in each boiler 35 sq No. and Description of valves to each boiler Two Spring Area of each valve 8.29 sq Pressure to which they are adjusted 132 lbs they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

llest distance between boilers or uptakes and bunkers or woodwork 18" Dia. of boilers 12-0" Length 10-0"

erial of shell plates Steel Thickness 3/4" Range of tensile strength 28/32 Are the shell plates welded or flanged No

rip. of riveting: cir. seams L.D. Riv. long. seams Butt Straps Diameter of rivet holes in long. seams 7/8" Pitch of rivets One row 6 3/4" Two rows 3 3/8"

of plates 5/4" width of butt straps 1-1 7/8" Per centages of strength of longitudinal joint rivets 88.3 Working pressure of shell by plate 87

s 33.6 lbs Size of manhole in shell 17" x 13" Size of compensating ring 31" x 27" x 3/4" No. and Description of Furnaces in each boiler Two, plain Material Steel Outside diameter 3-4" Length of plain part top 5-10 1/2" Thickness of plates crown 9/16 3/64" bottom 7/8"

ription of longitudinal joint Welded No. of strengthening rings ✓ Working pressure of furnace by the rules top 140 lbs bottom 135 lbs Combustion chamber

es: Material S Thickness: Sides 9/16 1/32" Back 9/16 1/32" Top 9/16 1/32" Bottom 1" Pitch of stays to ditto: Sides 9 3/4" x 9 1/2" Back 9 3/4" x 9 1/2"

9 3/4" x 9 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 131 lbs Material of stays Steel Diameter at

llest part 1 7/16" Area supported by each stay 92.6 sq Working pressure by rules 140 lbs End plates in steam space: Material Steel Thickness 15/16"

h of stays 1 9/16" x 1 6/16" How are stays secured 2 x W Working pressure by rules 133 lbs Material of stays Steel Diameter at smallest part 2 1/4"

a supported by each stay 308.7 sq Working pressure by rules 134 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of

er back plate Steel Thickness 13/16" Greatest pitch of stays 16 3/4" x 9 1/2" Working pressure of plate by rules 135 lbs Diameter of tubes 3 1/4"

h of tubes 4 5/8" x 4 5/8" Material of tube plates Steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 12 1/8" Pitch across wide

er spaces 14" Working pressures by rules 137 Girders to Chamber tops: Material Steel Depth and thickness of

er at centre 6 5/8" x 1 1/4" Length as per rule 26 1/2" Distance apart 9 3/4" Number and pitch of Stays in each Two 9 1/2"

orking pressure by rules 133 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

erately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

s Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

orking pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,
FOR BLAIR & CO., LIMITED.
Geo. Reddish Manufacturer.

ates During progress of 1907: Dec 24, 30 1908: Jan 7, 14, 14, 21, 22 Is the approved plan of boiler forwarded herewith No. Blair's

Survey work in shops - - - - - Total No. of visits

hile During erection on board vessel - - - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under special survey. The materials & workmanship are good & efficient, and when tested with hydraulic pressure was found tight & satisfactory. The boiler is to be sent to Berkeley for fitting on board the vessel. This boiler secured on board tested under steam & found satisfactory.

Survey Fee ... £ 3 : 11 : 0 When applied for, 31.1.1908

Travelling Expenses (if any) £ : : When received, £2.13.4 Paid 12/2/08 by 17.8 Paid 18/2/08 by

James Barclay
Geo. L. Milner
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

FEB. 1 MAY 1908

Committee's Minute
 assigned 22 Minute on Lon. Rpt. to 70543

