

# REPORT ON BOILERS.

No. 30104

Received at London Office SAT. 18 AUG. 1917

Date of writing Report 8-8-17 191 When handed in at Local Office 11-8-17 191 Port of Hull

No. in Survey held at Hull Date, First Survey 1-5-17 Last Survey 10-8-17 191

Reg. Book. on the boiler for steel survey trawler "Thomas Alkinson" (Number of Visits 5) Gross Tons } Net

Master By whom built Cochrane & Sons Ltd When built 1917-8

Engines made at Dunfermline By whom made Cooper & Greig Ltd When made 1917-8

Boilers made at Hull By whom made C. H. Holmes & Co Ltd (Ld) When made 1917-8

Registered Horse Power Owners British Admiralty Port belonging to ✓

**MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.**—Manufacturers of Steel John Spencer & Sons (Letter for record S) Total Heating Surface of Boilers 1440 Is forced draft fitted no No. and Description of Boilers one single ended Working Pressure 200 Tested by hydraulic pressure to 400 Date of test 21-7-17

No. of Certificate 3224 Can each boiler be worked separately ✓ Area of fire grate in each boiler 48 No. and Description of safety valves to each boiler Two spring loaded Area of each valve 4.9 Pressure to which they are adjusted 205

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Smallest distance between boilers 8" Blagger and bunkers on woodwork 8" Blagger diam. of boilers 165" Length 10'-8"

Material of shell plates steel Thickness 1 5/16" Range of tensile strength 28-32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams double long. seams J.P.D.B.1 Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 5/8"

Gap of plates or width of butt straps 18" Per centages of strength of longitudinal joint rivets 85.9 plate 85.5 Working pressure of shell by rules 202 Size of manhole in shell 16" x 12" Size of compensating ring 7" x 1 5/16" No. and Description of Furnaces in each boiler Three plain Material steel Outside diameter 40" Length of plain part 78 1/2" Thickness of plates 1 13/16"

Description of longitudinal joint welded No. of strengthening rings ✓ Working pressure of furnace by the rules 206 Combustion chamber plates: Material steel Thickness: Sides 3/4" Back 2 3/32" Top 3/4" Bottom 3/4" Pitch of stays to ditto: Sides 10" x 8" Back 9 3/4" x 8 3/4" x 9 3/4"

Top 11" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 208 Material of stays steel Diameter at smallest part 2.07 Area supported by each stay 88 Working pressure by rules 211 End plates in steam space: Material steel Thickness 1 1/32"

Pitch of stays 19" x 17 1/2" How are stays secured D. & W. Working pressure by rules 210 Material of stays steel Diameter at smallest part 7.5

Area supported by each stay 335 Working pressure by rules 233 Material of Front plates at bottom steel Thickness 1 5/16" Material of Lower back plate steel Thickness 1 5/16" Greatest pitch of stays 13 3/4" x 9 9/16" Working pressure of plate by rules 216 Diameter of tubes 3 1/2"

Pitch of tubes 4 7/8" Material of tube plates steel Thickness: Front 1 1/16" + 3/4" Abbr Back 7/8" Mean pitch of stays 10" Pitch across wide water spaces 14" Working pressures by rules 275 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 11" x 1 3/4" Length as per rule 36.218" Distance apart 11" Number and pitch of Stays in each Three 8"

Working pressure by rules 201 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 ✓ 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 ✓

The foregoing is a correct description,  
for CHARLES D. HOLMES & CO. LTD Manufacturer.

Dates of Survey: During progress of work in shops May 1, 9, 23, 29, Jun 11, 14, Jul 2, 6, 10, 13, 26 Is the approved plan of boiler forwarded herewith Forwarded with ✓  
while building: During erection on board vessel 27, 31, 31, Aug 3 Total No. of visits 15 John July 18/17

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under special survey in accordance with the approved plan & the rules of this Society, the materials & workmanship are good. It has been tested by hydraulic pressure as above & found sound & tight. The boiler has been properly fitted & secured on board the vessel & its safety valves adjusted under steam.

Survey Fee ... £ 6 : 10 : When applied for, 17-8-1917 W.K.R.  
Travelling Expenses (if any) £ : : When received, 31-8-1917 J.L.

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

Committee's Minute TUE. 21. AUG. 1917.  
Assigned

