

REPORT ON MACHINERY.

No. 40197

Received at London Office
 1920 Port of **GLASGOW**
 Survey held at **Glasgow** Date, First Survey **22. 5. 17.** Last Survey **27. 5. 1920.**
 on the **Engine No. 543 (Standard A)** (Number of Visits **82.**)

Built at **Glasgow** By whom built **Fairfield Shipbuilding Co. Ltd. No. 543**
 When made **1920**
 Port belonging to **Glasgow**

Horse Power **489** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **No**

ES, & Co. — Description of Engines Triple Expansion
 No. of Cylinders **3** No. of Cranks **3**
 Cylinders **24" 44" 43"** Length of Stroke **48** Revs. per minute **78** Dia. of Screw shaft **14.7** Material of screw shaft **Steel**
 Is the after end of the liner made water tight **No**
 If the liner is in more than one length are the joints burned **No**
 If the liner does not fit tightly at the part **No**
 the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive **No**
 If two **No**
 e fitted, is the shaft lapped or protected between the liners **No** Length of stern bush **13.99"**

Dia. of Crank shaft journals **14.5"** Dia. of Crank pin **14.5"** Size of Crank webs **28x9"** Dia. of thrust shaft under **13.99"**
 Dia. of screw **14.5"** Pitch of Screw **14.5"** No. of Blades **14.5"** State whether moveable **No** Total surface **14.5"**
 Feed pumps **2** Diameter of ditto **4"** Stroke **24"** Can one be overhauled while the other is at work **Yes**
 Bilge pumps **2** Diameter of ditto **4"** Stroke **24"** Can one be overhauled while the other is at work **Yes**
 Donkey Engines **2** Sizes of Pumps **24"** No. and size of Suctions connected to both Bilge and Donkey pumps **24"**
 In Holds, &c. **No**

Is a separate Donkey Suction fitted in Engine room & size **No**
 Are the roses in Engine room always accessible **No** Are the sluices on Engine room bulkheads always accessible **No**
 Are they Valves or Cocks **No**
 Are the Discharge Pipes above or below the deep water line **No**
 Are the Blow Off Cocks fitted with a spigot and brass covering plate **No**
 How are they protected **No**

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **No**
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges **No**
 Is it fitted with a watertight door **No** worked from **No**

RS, & Co. — (Letter for record) Manufacturers of Steel **No**
 Is Forced Draft fitted **No** No. and Description of Boilers **No**
 Tested by hydraulic pressure to **No** Date of test **No** No. of Certificate **No**

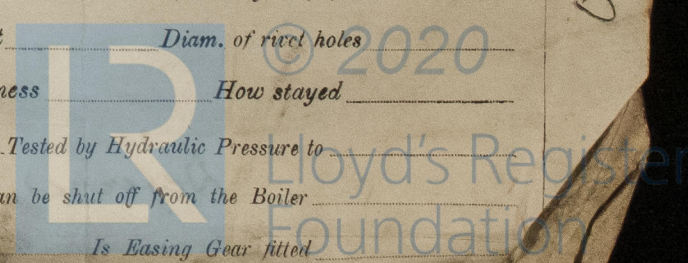
Area of fire grate in each boiler **No** No. and Description of Safety Valves to **No**
 Area of each valve **No** Pressure to which they are adjusted **No** Are they fitted with easing gear **No**
 Mean dia. of boilers **No** Length **No** Material of shell plates **No**
 Descrip. of riveting: cir. seams **No**
 Diameter of rivet holes in long. seams **No** Pitch of rivets **No** Lap of plates or width of butt straps **No**
 Working pressure of shell by rules **No** Size of manhole in shell **No**

No. and Description of Furnaces in each boiler **No** Material **No** Outside diameter **No**
 Thickness of plates **No** Description of longitudinal joint **No** No. of strengthening rings **No**
 Combustion chamber plates: Material **No** Thickness: Sides **No** Back **No** Top **No** Bottom **No**
 Working pressure by rules **No** End plates in steam space: **No**

Working pressure by rules **No** Material of stays **No**
 Area supported by each stay **No** Working pressure by rules **No** Material of Front plates at bottom **No**
 Greatest pitch of stays **No** Working pressure of plate by rules **No**
 Material of tube plates **No** Thickness: Front **No** Back **No** Mean pitch of stays **No**
 Working pressures by rules **No** Girders to Chamber tops: Material **No** Depth and **No**
 Distance apart **No** Num. and pitch of stays in each **No**
 Steam dome: description of joint to shell **No** % of strength of joint **No**

Thickness of shell plates **No** Material **No** Description of longitudinal joint **No** Diam. of rivet holes **No**
 Working pressure of shell by rules **No** Crown plates **No** Thickness **No** How stayed **No**
 Type **No** Date of Approval of Plan **No** Tested by Hydraulic Pressure to **No**
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler **No**
 Pressure to which each is adjusted **No** Is Easing Gear fitted **No**

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If so, is a report now forwarded?

- 2. Connecting Rod top end Bolts & nuts
- 2. " " Bottom " " "
- 2. Main Bearing Bolts and nuts
- 3. Crank shaft coupling bolts & nuts
- 1 set Feed and Bilge pump Valves
- 12. Studs & nuts for Cyl^r & Steam Chest Covers

- 12 Junk ring studs and nuts
- 12 Condenser Tubes
- 12 Packing rings for Piston and Valve rods
- 1. HP. Piston Valve.

The foregoing is a correct description,

regarding is a correct description,
FOR THE FAIRFIELD SHIPBUILDING

AND ENGINEERING CO., LIMITED.

Ally & Cleghorn Manufacturer.

Dates	{ During progress of work in shops -- }	1917 May 22 June 1-28 July 6-10-30 Aug. 6-9-21 Sept 3-12-21 Oct 2-4-8-15-22-24-29 Nov 1-4-11-18-25
of Survey while building	{ During erection on board vessel --- }	2nd Dec 3-11-20. 1918 Jan 8-10-15-24 Feb 6-14-22-26 Mar 14-8-18-25 Apr 13-9-30 May 7-11-14-21-28 June 6-21 Sept. 24-25 Oct. 2-6-22-29 Nov 8-15-21-28 Dec 4-5-17-23. 1919 Jan 8-15-22-29 Feb 12-19-26 Mar 13-20 Apr 12-19 May 9-24 June 3-5-9-13-20 July 15-14 Aug. 8 Sept. 14-23 Oct 13. 1920
	Total No. of visits	82

Is the approved plan of main boiler forwarded herewith

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” ” ” *donkey* ” ” ”

Dates of Examination of principal parts—Cylinders 2. 10. 18 Slides 2. 10. 18 Covers 8. 11. 18 Pistons 2. 10. 18 Rods 22-1

Connecting rods 22.10.18 Crank shaft 10.1.18 Thrust shaft — Tunnel shafts — Screw shaft — Propeller —

Stern tube ✓ Steam pipes tested — Engine and boiler seatings — Engines holding down bolts

Completion of pumping arrangements ✓ Boilers fixed — Engines tried under steam

Completion of fitting sea connections — Stern tube — Screw shaft and propeller

Main boiler safety valves adjusted	Thickness of adjusting washers

Material of Crank shaft **S** Identification Mark on Do. **543 WGM** Material of Thrust shaft Identification Mark on Do.

<i>Material of Tunnel shafts</i>	<i>Identification Marks on Do.</i>	<i>Material of Screw shafts</i>	<i>Identification Marks on Do.</i>
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<i>Material of Steam Pipes</i>	<i>Test pressure</i>
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Is an installation fitted for burning oil fuel *Is the flash point of the oil to be used over 150°F.*

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case..... If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, &c.)

These Engines have been built under Special Survey & in accord with the Specification. The workmanship & material are of good quality.

These Engines were originally built to the order of the Ministry of Shipping, but have now been sold to Messrs John & Turnbull & Co. Greenock & have now been shipped to Messrs Buchanan & Sons Shipbuilders Vancouver B.C. to be fitted into a new vessel building by their Engines completed as a Standard A Type

The amount of Entry Fee ...	£	:	:	When applied for,
Special ...	£	58/10/-	:	19...
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	11/9/20

Committee's Minute GLASGOW 14 JUL 1920

Assigned

Deferres.

W^{ell} = Gordon-Muchlin

Engineer Surveyor to Lloyd's Register of Shipping

TUE. NOV. 2 1920

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Lloyd's Register
Foundation