

## REPORT ON MACHINERY.

No. 40686

Received at London Office

1920

Survey held at Glydebank Date, First Survey 26-5-19 Last Survey 20-5-1920  
on the SS "Dramatist" (Number of Visits 11)  
Built at Glasgow By whom built C. Connell & Co. (483) When built 1920  
By whom made John Brown & Co. Ltd. (S.O. 12750 19) when made 1920  
By whom made Dunoon & Jackson when made 1920  
Horse Power 3040 Owners J. D. Harrison Port belonging to Liverpool  
Is Refrigerating Machinery fitted for cargo purposes — Is Electric Light fitted —

LINE ENGINES, &c.—Description of Engines Brown Curtis, Double Reduction Gears of Turbines (3) H.P. 1 L.P.  
Diameter of Pinion Shaft 1" Red H.P. 1 L.P. 4" L.P. 5" 2" Red 10 1/2"  
Distance between Centres of Bearings L.P. 22" H.P. 23" Diameter of Pitch Circle H.P. 7.43 L.P. 11.253 2" Red 15.314  
Diameter of Thrust Shaft under Collars 2" Red 31" 1" 11" Diameter of Tunnel Shaft as per rule  
Diameter of Propeller as fitted Pitch of Propeller —  
State whether Moveable — Total Surface — Diameter of Rotor Drum, H.P. — L.P. — Astern —  
Revs. per Minute at Full Power, Turbine H.P. 11.3630 L.P. 2400 Propeller 75

## DETAILS OF BLADING.

	H. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION .....									
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size of Feed pumps  
size of Bilge pumps  
size of Bilge suction in Engine Room  
In Holds, &c.  
Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size  
Are the roses in Engine room always accessible  
Are they Valves or Cocks  
Are the Discharge Pipes above or below the deep water line  
Are the Blow Off Cocks fitted with a spigot and brass covering plate  
How are they protected  
Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges  
Is it fitted with a watertight door worked from

RS, &c.—(Letter for record) Manufacturers of Steel  
Is Forced Draft fitted No. and Description of Boilers  
Tested by hydraulic pressure to Date of test No. of Certificate  
Area of fire grate in each boiler No. and Description of Safety Valves to  
Are they fitted with easing gear  
Area of each valve Pressure to which they are adjusted  
Material of shell plates  
Range of tensile strength Are the shell plates welded or flanged  
Descrip. of riveting: cir. seams  
Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps  
Working pressure of shell by rules Size of manhole in shell  
No. and Description of Furnaces in each Boiler Material Outside diameter  
Thickness of plates Description of longitudinal joint No. of strengthening rings  
Combustion chamber plates: Material Thickness: Sides Back Top Bottom  
If stays are fitted with nuts or riveted heads Working pressure by rules  
End plates in steam space  
Diameter at smallest part Area supported by each stay Working pressure by rules Material of stays  
Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom  
Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
Material of tube plates Thickness: Front Back Mean pitch of stays  
Working pressures by rules Girders to Chamber tops: Material Depth and  
Length as per rule Distance apart Number and pitch of stays in each  
Steam dome: description of joint to shell % of strength of joint Diameter  
Description of longitudinal joint Diameter of rivet holes Pitch of rivets  
Crown plates: Thickness How stayed

Lloyd's Register  
1920



**SUPERHEATER.**

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

The foregoing is a correct description,

For JOHN BROWN & COMPANY, Limited

*R. MacLennan*

Manufacturer.

Cashier.

Dates of Survey while building  
During progress of work in shops -- 1919. May 26. Aug 6-8. Sept 19. Nov 5. Dec 29. 1920. May 3. 6. 13. 20.  
During erection on board vessel --  
Total No. of visits 11

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings 4/8/19, 8/8/19 Rotors 5/4/19 Blading 26/5/19 Gearing 20/5/20, 29/12/19  
Rotor shafts 5/4/19 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 sized Engines tried under steam  
Main boiler safety valves adjusted Thickness of adjusting washers

Material and tensile strength of Rotor shaft Sumner Steel 41.5, 42.4, 33.7, 33.2 Identification Mark on Do 2663 2668 2912 3072  
Material and tensile strength of Pinion shaft S. Nickel Steel 42 to 48 tons Identification Mark on Do 126.6, 103 104 0717 K 2

Material of Wheel shaft Steel Identification Mark on Do 149 0717 K 29/5/20 Material of Thrust shaft Identification Mark on Do  
Material of Tunnel shafts Identification Marks on Do Material of Screw shafts Identification Marks on Do  
Material of Steam Pipes Test pressure

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 a duplicate of a previous case If so, state name of vessel

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

These turbines and gearing have been constructed under special survey the materials and workmanship are of good description and are to be fitted on board the vessel by Messrs Dunsen & Jackson.

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

*A. M. C. Keane*

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Glasgow 28 DEC 1920

Assigned See attached machinery report



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Rpt. 5a.

Date of writing R

No. in Su

Reg. Book.

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Master

Engines mad

Boilers made

Registered Ho

MULTITU

(Letter for re

Boilers 1

No. of Certifi

safety valves

Are they fitted

Smallest disto

Material of s

Descrip. of r

Map of place

rules 229

boiler 3 Co

Description of

plates: Mate

W= 10 1/4 x

Top 9 1/2 x 8

smallest part

Pitch of stay

Area support

Lower back p

Pitch of tube

water spaces

girder at cen

Working pres

Diameter

Pitch of rivets

SUPERHE

Date of Test

Diameter of Sa

Dates of Survey while building

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Travelling

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Assigned