

REPORT ON MACHINERY

No. 40395

Received at London Office 11th SEP 30 1920

Date of writing Report 18.9.20 When handed in at Local Office 18.9.20 Port of Glasgow

No. in Survey held at Coatbridge Date, First Survey 25.6.1920 Last Survey 2.9.1920

Reg. Book. on the Machinery for S. S. "ALLAN WATER" (Number of Visits)

Master Built at Southampton. By whom built Day Summers & Co. Ltd. 185. Tons Gross Net 1920

Engines made at Coatbridge. By whom made Wm. Beardmore & Co. Ltd. 564. when made 1920.

Boilers made at Southampton. By whom made Messrs. Day, Summers & Co. Ltd. when made 1920.

Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 83 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13" 21" 35" Length of Stroke 24" Revs. per minute Dia. of Screw shaft as per rule 7.33" Material of screw shaft M.S. as fitted 7.5"

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight in the propeller boss

If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 2'-8"

Dia. of Tunnel shaft as per rule none Dia. of Crank shaft journals as per rule 6.81" Dia. of Crank pin 7" Size of Crank webs 13 3/4" x 4 1/2" Dia. of thrust shaft under collars 7" Dia. of screw 9'-0" Pitch of Screw 11'-6" No. of Blades 4 State whether moveable No Total surface 34 sq ft.

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to each boiler

Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets plate Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top bottom Thickness of plates crown bottom Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

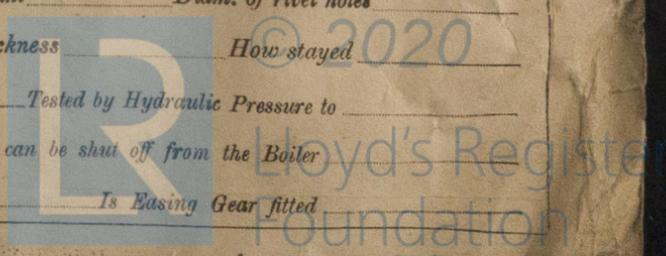
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

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



W429-0108

IS A DONKEY BOILER FITTED? N^o If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

WILLIAM BEARMORE & CO., LIMITED.

Manufacturer.

per R. Sneddon.

Dates of Survey while building { During progress of work in shops -- } 1920 Jun 25 29 July 2 12 Aug 12 17 Sep 2
{ During erection on board vessel -- }
Total No. of visits 7

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 12.7.20 Slides 17.8.20 Covers 12.7.20 Pistons 12.8.20 Rods 12.8.20
Connecting rods 17.8.20 Crank shaft 29.6.20 Thrust shaft 17.8.20 Tunnel shafts none Screw shaft 2.7.20 Propeller 2.7.20

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 M.S. Identification Mark on Do. Floydo 5106 Material of Thrust shaft M.S. Identification Mark on Do. 5674 17.8.20
Material of Tunnel shafts none Identification Marks on Do. GRW Material of Screw shafts M.S. Identification Marks on Do. 5674 2.7.20
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 duplicate of a previous case yes If so, state name of vessel S.S. "Cambalu"

General Remarks (State quality of workmanship, opinions as to class, &c. The Engines have been built under Special Survey. The materials & Workmanship are good. The engines have been dispatched to Southampton to be fitted on board the vessel.)

The above machinery has been efficiently fitted on board, and on trial proved satisfactory. (See separate report attached.)

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 1 : - :
Special ... £ 6 : 5 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 29.9.20.
When received, 14.12.20

John Barr. & A. H. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 29 SEP 1920
Assigned Deferred

FRI. DEC. 31 1920

