

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

21 JUL 1927

Date of writing Report 19 When handed in at Local Office 16. 7. 1927 Port of **NEWCASTLE-ON-TYNE**
 No. in Survey held at **Jarrow** Date, First Survey **11 January** Last Survey **6 July 1927**
 Reg. Book. **39961** on the **S.S. "BEACON STREET"** (Number of Visits **41**)
 Built at **Hebburn** By whom built **Palmer's Co. Ltd** Yard No. **966** When built **1927**
 Engines made at **Jarrow** By whom made **Palmer's Co. Ltd** Engine No. **966** when made **1927**
 Boilers made at **Jarrow** By whom made **Palmer's Co. Ltd** Boiler No. **966** when made **1927**
 Registered Horse Power Owners **Beacon Transport Co. Ltd.** Port belonging to **Freeport.**
 Nom. Horse Power as per Rule **582** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**
 Trade for which Vessel is intended

ENGINES, &c.—Description of Engines **TRIPLE EXPANSION INVERTED MARINE TYPE** Revs. per minute **77**
 No. of Cylinders **28**, 46.76 Length of Stroke **51** No. of Cranks **3** No. of Cranks **3**
 Crank shaft, dia. of journals as per Rule **14.5** Crank pin dia. **14.75** Crank webs Mid. length breadth **28.5** Thickness parallel to axis **10**
 as fitted **14.75** Mid. length thickness **10** shrunk Thickness around eye-hole **6.5**
 Intermediate Shafts, diameter as per Rule **13.8** Thrust shaft, diameter at collars as per Rule **14.5**
 as fitted **14** as fitted **14.75**
 Main Shafts, diameter as per Rule **15.38** Screw Shaft, diameter as per Rule **15.5** Is the tube shaft fitted with a continuous liner **Yes**
 as fitted **15.5** as fitted **15.5**
 Bronze Liners, thickness in way of bushes as per Rule **.77** Thickness between bushes as per Rule **.578** Is the after end of the liner made watertight in the
 as fitted **.76** as fitted **.75**
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **Yes**
 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 **Yes**
 If two liners are fitted, is the shaft lapped or protected between the liners **Yes** Is an approved Oil Gland or other appliance fitted at the after
 end of the tube shaft **No** Length of Bearing in Stern Bush next to and supporting propeller **5.3**
 Propeller, dia. **19.0** Pitch **16.0** No. of Blades **4** Material **BRONZE** whether Moveable **YES** Total Developed Surface **104** sq. feet
 Main Pumps worked from the Main Engines, No. **Two** Diameter **5** Stroke **27** Can one be overhauled while the other is at work **YES**
 Auxiliary Pumps worked from the Main Engines, No. **Two** Diameter **5** Stroke **27** Can one be overhauled while the other is at work **YES**
 Bilge Pumps No. and size **1 PAIR 10.5 X 8 X 24** Pumps connected to the Main Bilge Line No. and size **1 @ 9" X 10" X 10", 2 @ 5" X 27"**
 How driven **STEAM** How driven **STEAM**
 Lubricating Oil Pumps, including Spare Pump, No. and size **ONE DUPLEX 9" X 10" X 10"**
 Are two independent means arranged for circulating water through the Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary
 Pumps;—In Engine and Boiler Room **3 @ 3.5**
 Holds, &c. **2 - 2 1/2 hold. 2 - 2 1/2 hold. pumps**

Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 9" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 and size **1 @ 5"** Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes **YES**
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges **YES**
 Are all Sea Connections fitted direct on the skin of the ship **YES** Are they fitted with Valves or Cocks **BOTH**
 Are they fitted sufficiently high on the ship's side to be seen without lifting the stokehold plates **YES** Are the Overboard Discharges above or below the deep water line **ABOVE**
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel **YES** Are the Blow Off Cocks fitted with a spigot and brass covering plate **YES**
 How are they protected **None**
 Are pipes carried through the bunkers **NONE** Have they been tested as per Rule **Yes**
 Are pipes pass through the deep tanks **None** Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **YES**
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one
 compartment to another **YES** Is the Shaft Tunnel watertight **Yes** Is it fitted with a watertight door **Yes** worked from **Yes**

MAIN BOILERS, &c.—(Letter for record **S**) Total Heating Surface of Boilers **8649**
 Forced Draft fitted **YES** No. and Description of Boilers **THREE CYLINDRICAL MULTITUBULAR** Working Pressure **180 LBS.**
A REPORT ON MAIN BOILERS NOW FORWARDED? YES
A DONKEY BOILER FITTED? No If so, is a report now forwarded? **Yes**
ANS. Are approved plans forwarded herewith for Shafting **Yes** Main Boilers **YES** Auxiliary Boilers **Yes** Donkey Boilers **Yes**
 (If not state date of approval)
 General Pumping Arrangements **YES** Oil fuel Burning Piping Arrangements **YES**

SPARE GEAR. State the articles supplied:— One propeller shaft complete, 2 bronze propeller blades, 12 springs for L.P. pistons,
 2 end and 2 bottom end bolts and nuts, 2 main bearing bolts and nuts, 1 set of coupling bolts, 1 set of bilge pump valves
 1 set of check valves, 6 cylinder cover studs, 12 boiler tubes, 12 condenser tubes and 100 ferrules, 12 junk
 bolts, 2 cut steel plates, 1 cut iron bar, assorted, 1 pair bottom end bearings, 1 set donkey pump valves, a quantity of
 assorted bolts and nuts.

The foregoing is a correct description,
James Shipbuilding & Iron Co., Ltd
A. Brown
 Manager, Engine Ward

Manufacturer.



During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits

1927 Jan. 11. Feb. 9. 10. 15. 16. 18. Mar. 1. 4. 8. 14. 16. 17. 23. 29. 30. Apr. 1. 14. 18. 21. 25. 27. 28. May 2. 4. 5. 11.
 12. 13. 18. 20. 23. 25. 31. June 3. 9. 13. 15. 27. July 1. 5. 6.

41.

Dates of Examination of principal parts—Cylinders 1.4.27 Slides 1.4.27 Covers 23/5/27
 Pistons 28.4.27 Piston Rods 28.4.27 Connecting rods 28.4.27
 Crank shaft 28.4.27, 2.5.27 Thrust shaft 5.5.27 Intermediate shafts 5.5.27
 Tube shaft ✓ Screw shaft 18.5.27 Propeller 18.5.27
 Stern tube 8.3.27 Engine and boiler seatings 27.6.27 Engines holding down bolts 27.6.27
 Completion of pumping arrangements 27.6.27 Boilers fixed 27.6.27 Engines tried under steam 6.7.27
 Main boiler safety valves adjusted 6.7.27 Thickness of adjusting washers Start. 2 1/4" A.T. 1/4" 2nd 1 1/2" A.T. 1/4" 3rd 1 1/2" A.T. 1/4" 17.9.27
 Crank shaft material STEEL Identification Mark 392 Thrust shaft material STEEL Identification Mark No 131
 Intermediate shafts, material STEEL Identification Marks 12998 Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material STEEL Identification Mark R.L. 1300 18.3.27 Steam Pipes, material STEEL Test pressure 540 LBS Date of Test 15/6/27
 Is an installation fitted for burning oil fuel YES. ✓ Is the flash point of the oil to be used over 150°F. YES. ✓
 Have the requirements of the Rules for carrying and burning oil fuel been complied with YES. ✓
 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. The machinery of this vessel has been constructed under Special Survey. The materials & workmanship are sound & good. The machinery has been efficiently installed & tried under steam at a running trial. The safety valves of the boilers have been adjusted under steam. In our opinion this vessel is now eligible for notation in the Society's Register Book of +LMC. 7.27. T.S.C.L. 7.27.

It is submitted that this vessel is eligible for THE RECORD. + LMC 7 27 FD. CL. Fitted for oil fuel 7.27. FP. above 150°F.

W.D.
27/7/27
J.P.R.

Thomas Napier & Sons
 Engineer Surveyor to Lloyd's Register of Shipping.

NEWCASTLE-ON-TYNE

The amount of Entry Fee ... £ 6 : 0 :
 Special ... £ 104 : 2 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 19 JULY 1927
 When received, 2/8/27

TUES. 26 JUL 1927

Committee's Minute

Assigned

+ L.M.C. 7.27 F.D. C.L.
 Fitted for Oil Fuel 7.27, F.P. above 150°F



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The Surveyors are requested not to write on or below the space for Committee's Minute.