Rpt. 4.

No. 14126

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 20 JUN 1930

Date of writing Report 5. 6. 1930 When handed in at Local Office 6. 6. 1930 Port of MIDDLESBROUGH.

No. in Reg. Book. Survey held at SOUTH BANK. Date, First Survey 7 March Last Survey 5. 6. 1930 (Number of Visits)

on the Stm Trawler "DAILY MAIL" Tons Gross 386. Net 165

Built at SOUTH BANK. By whom built Smiths Dock Co. Ltd. Yard No. 915. When built 1930.

Engines made at do. By whom made do. Engine No. 382. when made 1930

Boilers made at STOCKTON. By whom made Blair & Co (1926) Ltd Boiler No. C. 825. when made 1930.

Registered Horse Power 114 Owners The Boston Deep Sea Fishing & Ice Co Ltd. Port belonging to Fleetwood

Nom. Horse Power as per Rule 114.4. Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Yes.

ENGINES, &c.—Description of Engines Triple Expansion

Dia. of Cylinders 13¾". 23". 39" Length of Stroke 27" Revs. per minute 115. No. of Cylinders 3. No. of Cranks 3.

Dia. of **Crank shaft** journals as per rule 7.6" as fitted 7 3/4" Dia. of Crank pin 7¾" Crank webs Mid. length breadth 11½" Mid. length thickness 4 13/16" shrunk Thickness parallel to axis 4 13/16" Thickness around eye-hole 3½"

Diameter of **Thrust shaft** under collars as per rule 7.6" as fitted 7 3/4" Diameter of **Tunnel shaft** as per rule 7.24 as fitted nil Diameter of **Screw shaft** as per rule 8.11" as fitted 8¼" 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 watertight in the propeller boss Yes.

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 plastic material insoluble in water and non-corrosive ✓

If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated ✓ Length of **Stern Bush** 3'-0½" Diameter of **Propeller** 10'-6"

Pitch of Propeller 10'-0" No. of Blades 4 State whether Moveable no. Total Surface 40. square feet.

No. of **Feed Pumps** fitted to the Main Engines 2. Diameter of ditto 3" Stroke 13½" Can one be overhauled while the other is at work Yes.

No. of **Bilge Pumps** fitted to the Main Engines 2. Diameter of ditto 3" Stroke 13½" Can one be overhauled while the other is at work Yes.

Total number and size of power driven **Feed and Bilge Auxiliary Pumps** 1-6"×4¼"×6 Duplex. Feed. 1-6"×4¼"×6" Duplex Bilge

No. and size of Pumps connected to the **Main Bilge Line** 1-6"×4¼"×6" Duplex.

No. and size of **Ballast Pumps** 1-6"×4¼"×6" No. and size of **Lubricating Oil Pumps**, including Spare Pump ✓

Are two independent means arranged for circulating water through the **Oil Cooler** ✓ No. and size of suctions connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 2-2" and in Holds, &c. 1-2" in Forward Store; 1-2½" in Slush Tank; 1-2½" in Slush Tank direct to Bilge Ejector

No. and size of **Main Water Circulating Pump Bilge Suctions** 1-4" No. and size of **Donkey Pump Direct Suctions** to the Engine Room Bilges 1-2" 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 connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes. Are the Discharge Pipes 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

What Pipes are carried through the bunkers Forward Bilge Suctions How are they protected Wood ceiling

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 Screw Shaft Tunnel watertight none Is it fitted with a watertight door ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 2075 ft².

Is Forced Draft fitted no No. and Description of Boilers 1 S.B. Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.

IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes. Auxiliary Boilers ✓ Donkey Boilers ✓
(If not state date of approval)

General Pumping Arrangements 17. 1. 30. Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— As per Rules + 1 C.P. Propeller; 1 set Air Pump Valves, 1 main check valve lid; 1 donkey check valve lid, 1 safety valve spring, 3 escape valve springs. ½ set valves for each donkey pump, 6 piston balls & nuts, 3 boile tubes, 3 condenser tubes, 20 condenser ferrules, quantity fire bars, gauge glasses & washers.

FOR SMITH'S DOCK COMPANY, LTD

The foregoing is a correct description,

S Westens

Shipyard Works Manager.

Manufacturer.

29/5/30

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

Dates of Survey while building

During progress of work in shops - - 1930. Mar. 7. 14. 18. 27 April 3. 5. 10. 16. 22. 25

During erection on board vessel - - - May 1. 5. 7. 9. 27 June 5.

Total No. of visits

Dates of Examination of principal parts—Cylinders 14. 3. 30 Slides 22. 4. 30.

Covers 14. 3. 30 Pistons 14. 3. 30 Rods 7. 3. 30.

Connecting rods 3. 4. 30 Crank shaft 27. 3. 30 Thrust shaft 27. 3. 30.

Tunnel shafts ✓ Screw shaft 16. 4. 30 Propeller 16. 4. 30

Stern tube 16. 4. 30. Engine and boiler seatings 22. 4. 30. Engines holding down bolts 5. 5. 30

Completion of pumping arrangements 27. 5. 30. Boilers fixed 5. 5. 30. Engines tried under steam 27. 5. 30.

Completion of fitting sea connections 22. 4. 30 Stern tube 22. 4. 30. Screw shaft and propeller 5. 5. 30.

Main boiler safety valves adjusted 27. 5. 30. Thickness of adjusting washers P. 11/32" S 5/16"

Material of Crank shaft S.M. Steel Identification Mark on Do. LLOYDS No. 629 J.H. 20.2.30.

Material of Thrust shaft S.M Steel Identification Mark on Do. LLOYDS No 678 J.H. 20.2.30.

Material of Tunnel shafts ✓ Identification Marks on Do. ✓

Material of Screw shafts S.M. Steel Identification Marks on Do. LLOYDS No 679 J.H. 20.2.30.

Material of Steam Pipes Copper. Test pressure 400 lbs. Date of Test 19. 5. 30

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of the Rules for carrying and burning oil fuel been complied with ✓

Is this machinery duplicate of a previous case No. If so, state name of vessel ✓

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

The materials and workmanship are good.
This machinery has been built under special survey in accordance with the Rules and Approved Plans, securely fitted aboard and tested under steam with satisfactory results.
In my opinion, it is eligible for classification with record +L.M.C. 6.30.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 6.30 C-L.

J. 23/6/30.

The amount of Entry Fee ... £ 3-0-0 When applied for, 19. 6. 1930

Special Ldn boiler .. £ 44-44-0

Donkey Boiler Fee ... £ : :

Travelling Expenses (if any) £ : : When received, 1. 7. 30

P. T. Man

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 24 JUN 1930

Assigned +L.M.C. 6.30

CERTIFICATE WRITTEN.

C.L.

Certificate to be sent to

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