

REPORT ON MACHINERY.

No. 28471

Received at London Office FRI. MAY. 7 - 1915

Date of writing Report 19 When handed in at Local Office 26. 4. 15 Port of Hull.
 Date, First Survey 25. 11. 14 Last Survey 14 - 4 - 1915
 No. of Visits 35
 Name of vessel "VERESIS." (1085)
 Built at Selby By whom built Cochrane & Co. Ltd.
 Engines made at Hull By whom made C. W. Holmes & Co. Ltd.
 Boilers made at Hull By whom made C. W. Holmes & Co. Ltd.
 Registered Horse Power Owners Atlas Ste. Fishing Co. Port belonging to Grimsby.
 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted yes.

ENGINES, &c.—Description of Engines Triple Expansion. No. of Cylinders 3. No. of Cranks 3.
 Dia. of Cylinders 13" 23" 37" Length of Stroke 24" Revs. per minute Dia. of Screw shaft as per rule 7.64" Material of screw shaft as fitted 7.34"
 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 the propeller boss yes. If the liner is in more than one length are the joints burned 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 If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 2'-11 1/2"
 Dia. of Tunnel shaft as per rule 6.84" Dia. of Crank shaft journals as per rule 7.19" Dia. of Crank pin 7/8" Size of Crank web 7/8" x 4 1/8" Dia. of thrust shaft under rollers 7/8" Dia. of screw 9' 3" Pitch of Screw 11'-4 1/2" No. of Blades 4. State whether moceable no. Total surface 32 sq ft
 No. of Feed pumps 1. Diameter of ditto 2 3/4" Stroke 14 1/4" Can one be overhauled while the other is at work
 No. of Bilge pumps 1. Diameter of ditto 2 3/4" Stroke 14 1/4" Can one be overhauled while the other is at work
 No. of Donkey Engines One. Sizes of Pumps 6" x 4 1/4" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 2-2" One forward, one aft. In Holds, &c. 4-2" Forecastle, Mainhold
 Forward slushwell, after slushwell. 2 1/2" ejector from all bilges.
 No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump. Is a separate Donkey Suction fitted in Engine room & size 2 1/2" ejectors.
 Are all the bilge suction pipes fitted with roses yes. Are the roses in Engine room always accessible yes. Are the sluices on Engine room bulkheads always accessible none.
 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.
 That pipes are carried through the bunkers Hold Suctions. How are they protected Wood casing.
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes.
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes.
 Dates of examination of completion of fitting of Sea Connections 15.1.15. of Stern Tube 15.1.15. Screw shaft and Propeller 15.1.15.
 Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel David Colville & Sons Ltd.
 Total Heating Surface of Boilers 1400 Is Forced Draft fitted no. No. and Description of Boilers One Single-ended
 Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 23.2.15. No. of Certificate 3059.
 Can each boiler be worked separately Area of fire grate in each boiler 46.8 sq ft No. and Description of Safety Valves to each boiler 2 Spring. Area of each valve 4.9 sq in Pressure to which they are adjusted 20.5 lbs. Are they fitted with easing gear yes.
 Smallest distance between boilers or uptakes and bunkers or woodwork 7" Mean dia. of boilers 165.5" Length 10'-6" Material of shell plates S.
 Thickness 1/4". Range of tensile strength 28 tons Are the shell plates welded or flanged Descrip. of riveting: cir. seams A.R.
 Long. seams T.R. 10, 13. Diameter of rivet holes in long. seams 1/4". Pitch of rivets 8 1/2". Lap of plates or width of butt straps 17 1/2".
 Percentages of strength of longitudinal joint rivets 85.4. Working pressure of shell by rules 204. Size of manhole in shell 16 x 12".
 Size of compensating ring 7" x 1/4". No. and Description of Furnaces in each boiler 3 plain. Material S. Outside diameter 39".
 Length of plain part top 6.5. crown 5.1. bottom 6.4. Description of longitudinal joint welded. No. of strengthening rings one.
 Working pressure of furnace by the rules 207. Combustion chamber plates: Material S. Thickness: Sides 1/16. Back 1/16. Top 1/16. Bottom 1/16.
 Pitch of stays to ditto: Sides 10 x 8. Back 8 1/2 x 9 1/4. Top 9 x 8. If stays are fitted with nuts or riveted heads nuts. Working pressure by rules 202.
 Material of stays S. Diameter at smallest part 2.07. Area supported by each stay 80 sq in Working pressure by rules 233. End plates in steam space: Material S. Thickness 1/32. Pitch of stays 14 1/2 x 17. How are stays secured RAIN. Working pressure by rules 210. Material of stays S.
 Diameter at smallest part 7.5. Area supported by each stay 331 sq in Working pressure by rules 236. Material of Front plates at bottom S.
 Thickness 1/32. Material of Lower back plate S. Thickness 29/32. Greatest pitch of stays 14 x 9. Working pressure of plate by rules 205.
 Diameter of tubes 3 1/2". Pitch of tubes 5 1/8 x 5. Material of tube plates S. Thickness: Front 29/32. Back 7/8. Mean pitch of stays 10 1/4 x 10.
 Pitch across wide water spaces 14 1/4. Working pressures by rules 294. Girders to Chamber tops: Material S. Depth and thickness of girder at centre 9 3/4 x 1 1/2. Length as per rule 36.4. Distance apart 9 x 7. Number and pitch of stays in each 3 @ 8".
 Working pressure by rules 210. Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked separately.
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivets
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 Stays stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

W269-0128

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

Two each top and bottom end connecting rod bolts & nuts, two main bearing bolts and nuts, one set of coupling bolts and nuts, one set each each feed & bilge pump valves, iron of various sizes, a quantity of assorted bolts & nuts etc.

The foregoing is a correct description,

P. 270 CHARLES D. HOLMES & Co. LTD.

Arthur Holmes

DIRECTOR. Manufacturer.

Dates of Survey while building: During progress of work in shops - 1914: Nov 25, Dec 7, 16, 18, 22, 24, 30; 1915: Jan 2, 5, 6, 7, 14, 15, 18, 20, 21, 28, Feb 4, 9. During erection on board vessel - 13, 19, 23, 25, Mar 1, 5, 11, 12, 15, 24, 25, 31, Apr 9, 12, 14. Total No. of visits 35.

Is the approved plan of main boiler forwarded with Ref No 2842 1/2 Melbeck

Dates of Examination of principal parts - Cylinders 27-1-15, Slides 11-3-15, Covers 11-3-15, Pistons 11-3-15, Rods 25-2-15, Connecting rod 25-2-15, Crank shaft 21-1-15, Thrust shaft 15-3-15, Tunnel shafts, Screw shaft 14-1-15, Propeller 14-1-15, Stern tube 14-1-15, Steam pipes tested 12-4-15, Engine and boiler seatings 18-1-15, Engines holding down bolts 12-4-15, Completion of pumping arrangements 14-4-15, Boilers fixed 12-4-15, Engines tried under steam 9-4-15, Main boiler safety valves adjusted 9-4-15, Thickness of adjusting washers FV 3/8" AV 3/8". Material of Crank shaft S, Identification Mark on Do. 1421, Material of Thrust shaft S, Identification Mark on Do. 1428, Material of Tunnel shafts, Identification Marks on Do., Material of Screw shafts S, Identification Marks on Do. 1419, Material of Steam Pipes Sapper solid drawn, Test pressure 400 lbs. hyd. press.

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 Section 49 of the Rules been complied with? Yes.

Is this machinery duplicate of a previous case? Yes. If so, state name of vessel S.S. "Melbeck".

General Remarks (State quality of workmanship, opinions as to class, &c.) The engines & boiler of this vessel have been constructed under special survey in accordance with the rules. The materials and workmanship are sound and good. The boiler tested by hydraulic pressure and with the engines secured on board and tested under steam. They are now in good order & safe working condition and respectfully submitted as being eligible in my opinion to be classed with the notation of time 4.15 in the Register's book.

It is submitted that this vessel is eligible for THE RECORD + LMC 4.15.

J.R.S.

J.W.D. 7/5/15

The amount of Entry Fee ... £ 1 : : When applied for, 6.5 19.15. Special ... £ 12 : 12 : : Donkey Boiler Fee ... £ : : Travelling Expenses (if any) £ : 8 2 14/5 19.15 15/5

J.G. Mackillop, Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUE. MAY. 11. 1915. Assigned + LMC 4.15.



MACHINERY CERTIFICATE 28172