

REPORT ON MACHINERY.

No. 31913

Received at London Office

MON JUN 28 1920

of writing Report 27/5/1920 When handed in at Local Office 27/5/1920 Port of *Hull*
 in Survey held at *Hull* Date, First Survey 5-11-19 Last Survey 29-5-1920
 Book. on the *S.T. MAI* (Number of Visits)

ster Built at *Beverley* By whom built *Robt Weldon & Gemmell* When built 1920
 ines made at *Hull* By whom made *Wm & Holmes Wood* No 1203 when made
 lers made at *Hull* By whom made *Wm & Holmes Wood* No 1201 when made 1920
 istered Horse Power Owners *The Fishing Co Ltd* Port belonging to

a. Horse Power as per Section 28 92 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted *Yes*

GINES, &c.—Description of Engines *Triple expansion* No. of Cylinders 3 No. of Cranks 3
 of Cylinders 13-23-37 Length of Stroke 26 Revs. per minute 112 Dia. of Screw shaft as per rule 7 7/8 as fitted 8 1/4 Material of screw shaft *Steel*
 he 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
 he propeller boss *Polished* If the liner is in more than one length are the joints burned *Polished* If the liner does not fit tightly at the part
 en the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *—* If two
 s are fitted, is the shaft lapped or protected between the liners *Redwall's Patent* Length of stern bush 40
 of Tunnel shaft as per rule 7 1/4 as fitted 7 1/4 Dia. of Crank shaft journals as per rule 7 1/4 as fitted 7 1/4 Dia. of Crank pin 7 1/4 Size of Crank webs 5 1/4 Dia. of thrust shaft under
 rs 7 1/4 Dia. of screw 9-9 Pitch of Screw 10-10 1/2 No. of Blades 4 State whether moveable *Yes* Total surface 25 ft
 of Feed pumps *One* Diameter of ditto 3 Stroke 14 1/2 Can one be overhauled while the other is at work *—*
 of Bilge pumps *One* Diameter of ditto 3 Stroke 14 1/2 Can one be overhauled while the other is at work *—*
 of Donkey Engines *Two* Sizes of Pumps 5" x 2 1/2" x 5" FLYWHEEL No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room *Two 2' DIA* In Holds, &c. *ONE 2" DIA EACH COMPARTMENT*

of Bilge Injections *ONE* sizes 3 1/2 Connected to condenser, or to circulating pump *PUMP* Is a separate Donkey Suction fitted in Engine room & size *3" ELECTOR*
 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 *NINE*
 all connections with the sea direct on the skin of the ship *YES* Are they Valves or Cocks *BOTH*
 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*
 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*
 pipes are carried through the bunkers *FOR SUCTIONS & WINCH STEAM* How are they protected *STRONG CASING*
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *YES*
 he Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *YES*

Screw Shaft Tunnel watertight *NONE* Is it fitted with a watertight door *—* worked from *—*

ERS, &c.—(Letter for record *S*) Manufacturers of Steel *SPENCER & SONS*

Heating Surface of Boilers 1557 Is Forced Draft fitted *No* No. and Description of Boilers *ONE CYL MULTR.*

ing Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test 12/4/20 No. of Certificate 3425

ach boiler be worked separately Area of fire grate in each boiler 48 ft No. and Description of Safety Valves to
 boiler 2 SPRING LOADED Area of each valve 4.9 Pressure to which they are adjusted 205 lbs Are they fitted with easing gear *Yes*

est distance between boilers or uptakes and bunkers *14" LAGGED* Mean dia. of boilers 13-6 Length 10-8 Material of shell plates *STEEL*

Range of tensile strength 28 to 32 Are the shell plates welded or flanged *No* Descrip. of riveting: cir. seams *DOUBLE LAP*
 seams *TR. DBS* Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 8 1/8 Lap of plates or width of butt straps 1 1/2

antages of strength of longitudinal joint rivets 88 1/2 Working pressure of shell by rules 200 lbs Size of manhole in shell 16 x 12
 of compensating ring 7 x 1 1/2 No. and Description of Furnaces in each boiler *THREE PLAIN* Material *Steel* Outside diameter 40

of plain part top 6-9 bottom 6-3 Thickness of plates crown 7 1/2 bottom 7 1/2 Description of longitudinal joint *WELDED* No. of strengthening rings *ONE*
 ing pressure of furnace by the rules 214 Combustion chamber plates: Material *Steel* Thickness: Sides 3/4 Back 3/2 Top 4/8 Bottom 3/4

erson, of stays to ditto: Sides 9 1/2 x 9 Back 9 x 8 1/2 Top 9 1/2 x 7 If stays are fitted with nuts or riveted heads *NOTS* Working pressure by rules 220 lbs
 Water of stays *Steel* Area at smallest part 2.07 Area supported by each stay 85.5 Working pressure by rules 218 End plates in steam space:

ial *Steel* Thickness 1 1/4 Pitch of stays 1 1/2 x 1 1/2 How are stays secured *Welded* Working pressure by rules 240 Material of stays *Steel*
 at smallest part 7.5 Area supported by each stay 297 Working pressure by rules 200 Material of Front plates at bottom *Steel*

ess 1 Material of Lower back plate *Steel* Thickness 1 Greatest pitch of stays 1 1/2 x 9 Working pressure of plate by rules 255
 er of tubes 3 1/2 Pitch of tubes 5 x 1 1/2 Material of tube plates *Steel* Thickness: Front 1 Back 5/8 Mean pitch of stays 9 1/2

across wide water spaces 13 1/2 Working pressures by rules 203 Girders to Chamber tops: Material *Steel* Depth and
 ss of girder at centre 10 x 1 1/2 Length as per rule 2-9 1/2 Distance apart 9 1/2 Number and pitch of stays in each 3 2 7

ing pressure by rules 215 Steam dome: description of joint to shell % of strength of joint
 Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

rivets Working pressure of shell by rules Crown plates Thickness How stayed
 REHEATER. Type *SCHMIDT* Date of Approval of Plan 1/4/20 Tested by Hydraulic Pressure to 600 lbs
 Test 20/5/20 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes*
 r of Safety Valve 2 Pressure to which each is adjusted 215 Is Easing Gear fitted *Yes*

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two top and bottom nuts, two bottom and bottom nuts, two main bearing bolts & nuts, one set coupling bolts & nuts, one set air, fuel circulation & bilge pump valves, one main & one donkey check valve & seat, donkey pump valves, a quantity of assorted bolts & nuts & iron of various sizes

The foregoing is a correct description,

FOR CHARLES D. HOLMES & CO. LTD.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1919: Nov 5, 17, 21, 27, Dec 3, 15, 23, 19. 1920: Jan 6, 8, 9, Feb 3, 4, 5, 10, 18, 22
During erection on board vessel - - - 26, Mar 2, 4, 9, 17, 18, 23, 24 Apr 8, 11, 12, 16, 22, 23, 28, May 3, 12, 20, 22, 27, 28, 29
Total No. of visits 39

Is the approved plan of main boiler forwarded herewith

Yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 23/3/20 Slides 12/5/20 Covers 23/3/20 Pistons 28/4/20 Rods 17/3/20
Connecting rods 17/3/20 Crank shaft 17/3/20 Thrust shaft 5/2/20 Tunnel shafts 28/4/20 Screw shaft 12/2/20 Propeller 12/2/20
Stern tube 12/2/20 Steam pipes tested 18/5/20 Engine and boiler seatings 22/5/20 Engines holding down bolts 22/5/20
Completion of pumping arrangements 27/5/20 Boilers fixed 22/5/20 Engines tried under steam 27/5/20
Completion of fitting sea connections 18/2/20 Stern tube 18/2/20 Screw shaft and propeller 18/2/20
Main boiler safety valves adjusted 22/5/20 Thickness of adjusting washers $A\frac{5}{8}$ " $F\frac{1}{4}$ "
Material of Crank shaft Iron Identification Mark on Do. 2446 Material of Thrust shaft Iron Identification Mark on Do. 2426
Material of Tunnel shafts Iron Identification Marks on Do. 2459 Material of Screw shafts Iron Identification Marks on Do. 2434
Material of Steam Pipes Iron Test pressure 800 lbs/sq. in.

Is an installation fitted for burning oil fuel

No

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

No

If so, state name of vessel

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

The engines & boiler of this vessel have been built under special survey & the materials & workmanship are good. On completion the machinery was tried under full working conditions while moored to the Quay Wall with satisfactory results.

The machinery of this vessel is now in a good & efficient condition & eligible in my opinion to have the record LMC-5-20 marked in Red in the Society's Register Book.

THE RECORD. + L.M.C. 5-20

1688

30/6/20

J.M. L.W.D.

The amount of Entry Fee ... £ 1-0-0
Special ... £ 13-16-0
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 25/6/1920
When received, 30/7/20 R.B.M.

Engine Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. JUL. 2 1920

Assigned

+ LMC 5.20

CERTIFICATE WRITTEN.



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