

REPORT ON MACHINERY.

No. 19535

FRI. 25 OCT 1907

Port of Hull

Received at London Office

No. in Survey held at Hull

Date, first Survey May 29th

Last Survey 22nd Oct 1907

Reg. Book.

42 Suffon the Steel Ss K. Marjorie

(Number of Visits 31)

Tons Gross 294
Net 113

Master Built at Hull

By whom built Earles & Co Ltd

When built 1907

Engines made at Hull

By whom made Earles & Co Ltd

when made 1907

Boilers made at Hull

By whom made Earles & Co Ltd

when made 1907

Registered Horse Power

Owners Fleetwood Steam Fishing Co Ltd

Port belonging to Fleetwood

Nom. Horse Power as per Section 28 88

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 12 3/4" - 22" - 36" Length of Stroke 27" Revs. per minute 105 Dia. of Screw shaft as per rule 7.25" as fitted 8 1/4" Material of screw shaft Steel

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 Yes If the liner is in more than one length are the joints burned one length 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

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 35 1/2"

Dia. of Thrust shaft as per rule 6.78" as fitted 7 1/2" Dia. of Crank shaft journals as per rule 7.12" as fitted 7 3/4" Dia. of Crank pin 7 3/4" Size of Crank webs 14 1/2" x 4 1/2" Dia. of thrust shaft under collars 7 3/4" Dia. of screw 9" - 6" Pitch of Screw 11" - 9" mean No. of Blades 4 State whether moveable No Total surface 29 sq ft

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 14" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 14" Can one be overhauled while the other is at work Yes

No. of Donkey Engines Two Sizes of Pumps one 5" Centrifugal one 6" x 3" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two two inch In Holds, &c. one 2" from slush well. one 2" from fore compartment. and ejector suction from all parts of ship

No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes 3"

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

What pipes are carried through the bunkers hold suction 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 21.10.07 of Stern Tube 21.10.07 Screw shaft and Propeller 21.10.07

Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Beardmore & Co

Total Heating Surface of Boilers 1560 sq ft Is Forced Draft fitted No No. and Description of Boilers One cyl. multi

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 13.9.07 No. of Certificate 1595

Can each boiler be worked separately Area of fire grate in each boiler 36 sq ft No. and Description of Safety Valves to each boiler Two Spring Area of each valve 4.9 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 11" Mean dia. of boilers 13" - 6" Length 10" - 9" Material of shell plates Steel

Thickness 1 3/32" Range of tensile strength 28 - 32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L D

long. seams D.B.S.L.R Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 3/8" Lap of plates or width of butt straps 16 3/4"

Per centages of strength of longitudinal joint rivets 85.8 plate 85.7 Working pressure of shell by rules 180 lbs Size of manhole in shell 16" x 12"

Size of compensating ring 3'-4" x 2'-7" x 1 3/32" No. and Description of Furnaces in each boiler 2 Deighlons Material Steel Outside diameter 4'-2 1/2"

Length of plain part top Thickness of plates crown 5/8" Description of longitudinal joint Welded No. of strengthening rings 5

Working pressure of furnace by the rules 199 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 3/32" Top 5/8" Bottom 5/8"

Pitch of stays to ditto: Sides 9 1/2" x 8" Back 9 1/2" x 8" Top 9" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbs

Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 76 sq in Working pressure by rules 186 lbs End plates in steam space:

Material Steel Thickness 1 1/8" Pitch of stays 18" x 17 3/8" How are stays secured d ns Working pressure by rules 181 lbs Material of stays Steel

Diameter at smallest part 2 3/16" Area supported by each stay 312.75 sq in Working pressure by rules 206 lbs Material of Front plates at bottom Steel

Thickness 1 5/16" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 14 1/2" x 8" Working pressure of plate by rules 193 lbs

Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" x 5 1/8" Material of tube plates Steel Thickness: Front 1 5/16" Back 1 3/16" Mean pitch of stays 9 7/8"

Pitch across wide water spaces 14 1/2" Working pressures by rules 182 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 9 1/2" x 13 1/4" Length as per rule 3'-0" Distance apart 9" Number and pitch of stays in each 3 - 8"

Working pressure by rules 216 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

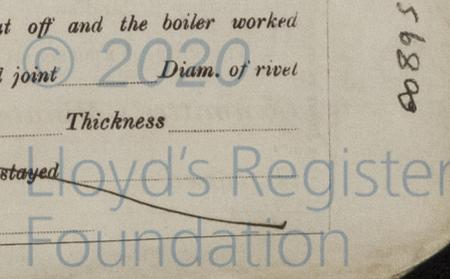
separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If 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

1700-396803-007



VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— *Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set air, feed and bilge pump valves, and a quantity of assorted bolts nuts etc.*

The foregoing is a correct description,

FOR EARLE'S
SHIPBUILDING & ENGINEERING CO. LIMITED.

F. J. Palethorpe

Dates of Survey while building: During progress of work in shops— 1907— May 29, Jun 5, 12, 17, 19, 22, 26, 29, Jul 4, 8, 17, 23, 30, Aug 20, 25, 30, Sep 4, 9, 12.
During erection on board vessel— Sep 13, 18, 19, 24, 30, Oct 4, 5, 7, 10, 18, 21, 22.
Total No. of visits 31.

Is the approved plan of main boiler forwarded herewith _____

(No. it was sent on with Hull Rpt No 19526)

Dates of Examination of principal parts— Cylinders 4 9 07 Slides 18 9 07 Covers 4 10 07 Pistons 24 9 07 Rods 24 9 07
Connecting rods 24 9 07 Crank shaft 24 9 07 Thrust shaft 4 10 07 Tunnel shafts _____ Screw shaft 9 9 07 Propeller 9 9 07
Stern tube 9 9 07 Steam pipes tested 7 10 07 Engine and boiler seatings 18 9 07 Engines holding down bolts 10 10 07
Completion of pumping arrangements 22 10 07 Boilers fixed 10 10 07 Engines tried under steam 22 10 07
Main boiler safety valves adjusted 10 10 07 Thickness of adjusting washers $\frac{3}{8}$ l. $\frac{5}{16}$ l.
Material of Crank shaft *Steel* Identification Mark on Do. *1939 ATG* Material of Thrust shaft *Steel* Identification Mark on Do. *102 GAH*
Material of Tunnel shafts _____ Identification Marks on Do. _____ Material of Screw shafts *Steel* Identification Marks on Do. *102 GAH*
Material of Steam Pipes *Solid drawn Copper* Test pressure *400 lbs* □

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines and boiler of this vessel have been constructed under special survey in accordance with the Society's Rules, the materials and workmanship are good. The boiler tested by hydraulic pressure and with the engines fitted on board and tested under steam, they are now in good order and safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of $\frac{1}{2}$ L.M.C. 10 07 in the Register Book*

These engines and boiler are similar to those fitted on the Lark Hull Report No 19526

It is submitted that this vessel is eligible for THE RECORD. $\frac{1}{2}$ L.M.C. 10.07.

The amount of Entry Fee..	£ 1	When applied for.	24/10/1907
Special	£ 13 4	When received.	27.11.07
Donkey Boiler Fee .. .	£ . . .		
Travelling Expenses (if any) £	. . .		

James Barclay
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
25.10.07

Committee's Minute TUES. 29 OCT 1907
Assigned + L.M.C. 10.07

