

Rpt. 4. **REPORT ON MACHINERY.** No. 19570

Port of *Hull*

Received at London Office

FRI. 8 NOV 1907

No. in Survey held at *Hull*

Date, first Survey *Apr. 26th*

Last Survey

Oct. 25th 1907

Reg. Book.

1800 on the *Trawler - Oshello*

(Number of Visits *30*)

Master *Selby*

Built at

By whom built *Bochane & Pons*

Tons Gross *201*

Net *94*

When built *1907*

Engines made at *Hull*

By whom made *Chas. S. Holmes & Co.*

when made *1907-10.*

Boilers made at *H*

By whom made *H*

when made *H.*

Registered Horse Power

Owners *A. Bannister*

Port belonging to *Grimby*

Nom. Horse Power as per Section 28 *67*

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 *12-21-34*

Length of Stroke *24*

Revs. per minute *112*

Dia. of Screw shaft as per rule *6.9*

Material of *Iron*

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 *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

Length of stern bush *31*

Dia. of Tunnel shaft as per rule *1.5*

Dia. of Crank shaft journals as per rule *6.5*

Dia. of Crank pin *6.2*

Size of Crank webs *13x13*

Dia. of thrust shaft under

collars *6.2*

Dia. of screw *8-6*

Pitch of Screw *11-0*

No. of Blades *4*

State whether moveable *No*

Total surface *27 1/2*

No. of Feed pumps *1*

Diameter of ditto *28*

Stroke *21*

Can one be overhauled while the other is at work *Yes*

No. of Bilge pumps *1*

Diameter of ditto *28*

Stroke *21*

Can one be overhauled while the other is at work *Yes*

No. of Donkey Engines *2*

Sizes of Pumps *(2 1/2 x 5) (2 1/2 x 4 1/2)*

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room *2-2 (7/8" & 1 1/2")*

In Holds, &c. *2-2 (1 1/2" & 2")*

2 1/2" Eye suction from bilge well & all high with discharge on deck.

No. of Bilge Injections *1*

sizes *2 1/2*

Connected to condenser, or to circulating pump *Yes* Is a separate Donkey Suction fitted in Engine room & size *2 1/2" Eye*

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 *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 stowhold 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 *Hot water*

How are they protected *Wire 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 *24.7.07*

of Stern Tube *24.7.07*

Screw shaft and Propeller *24.7.07*

Is the Screw Shaft Tunnel watertight *Yes*

Is it fitted with a watertight door *Yes*

worked from *Yes*

BOILERS, &c.—(Letter for record *S*)

Manufacturers of Steel *Messrs. D. & C. Brown, Middlesbrough*

Total Heating Surface of Boilers *1110*

Is Forced Draft fitted *No*

No. and Description of Boilers *1 S.E. 9 1/2" vertical*

Working Pressure *180 lb.*

Tested by hydraulic pressure to *360 lb.*

Date of test *9.10.07*

No. of Certificate *1600*

Can each boiler be worked separately *Yes*

Area of fire grate in each boiler *31.3*

No. and Description of Safety Valves to

each boiler *2 Spring Loaded*

Area of each valve *3.9*

Pressure to which they are adjusted *180 lb.*

Are they fitted with easing gear *Yes*

Smallest distance between boilers or uptakes and bunkers or woodwork *7"*

Mean dia. of boilers *12-0"*

Length *10-0"*

Material of shell plates *Steel*

Thickness *1"*

Range of tensile strength *28-32*

Are the shell plates welded or flanged *No*

Descrip. of riveting: cir. seams *S.R. Lap*

long. seams *S.B.S. Rivet*

Diameter of rivet holes in long. seams *1 1/2"*

Pitch of rivets *7"*

Lap of plates or width of butt straps *15"*

Per centages of strength of longitudinal joint

rivets *88.7*

Working pressure of shell by rules *180*

Size of manhole in shell *16x12"*

Size of compensating ring *7x1"*

No. and Description of Furnaces in each boiler *2 Holmes*

Material *Steel* Outside diameter *3'5"*

Length of plain part *top*

Thickness of plates *bottom*

3 1/2"

Description of longitudinal joint *Welded*

No. of strengthening rings *—*

Working pressure of furnace by the rules *195*

Combustion chamber plates: Material *Steel*

Thickness: Sides *4/16"*

Back *4/16"*

Top *3/16"*

Bottom *4/16"*

Pitch of stays to ditto: Sides *9x8 1/2"*

Back *9x8 1/2"*

Top *8 1/2x8"*

If stays are fitted with nuts or riveted heads *Yes*

Working pressure by rules *204*

End plates in steam space:

Material of stays *Steel*

Diameter at smallest part *1 1/2"*

Area supported by each stay *105.75"*

Working pressure by rules *196*

Material of stays *Steel*

Material *Steel*

Thickness *1 1/2"*

Pitch of stays *16x16"*

How are stays secured *By nuts*

Working pressure by rules *196*

Material of stays *Steel*

Diameter at smallest part *5.75"*

Area supported by each stay *256"*

Working pressure by rules *225*

Material of Front plates at bottom *Steel*

Thickness *3/16"*

Material of Lower back plate *Steel*

Thickness *15/16"*

Greatest pitch of stays *15"*

Working pressure of plate by rules *198*

Mean pitch of stays *9 1/2"*

Diameter of tubes *3 1/2"*

Pitch of tubes *4 1/2x4 1/2"*

Material of tube plates *Steel*

Thickness: Front *3/16"*

Back *3/16"*

Mean pitch of stays *9 1/2"*

Pitch across wide water spaces *15"*

Working pressures by rules *180*

Girders to Chamber tops: Material *Iron*

Depth *—*

thickness of girder at centre *9x1 1/2"*

Length as per rule *2'8 1/2"*

Distance apart *8"*

Number and pitch of stays in each *20 8 1/2"*

Working pressure by rules *199*

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

—

—

—

—

—

—

—

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
 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 top & two bottom end connecting rods & nuts, two main bearing trees, one set of coupling trees & nuts, one set of feed & high pump valves, one main & one donkey feed check valve, Assorted trees & nuts.*

The foregoing is a correct description,

PER PRO CHARLES D. HOLMES & Co.

Manufacturer.

H. Allon

Dates of Survey while building
 During progress of work in shops— 1907— Apr 26 Jun 6. 14. 28. Jul 9 17. 20. 24. 26. 30. Aug 9 20. 28 Sep 5. 14. 17. 21. 25. 28.
 During erection on board vessel— Oct 1. 5. 7. 9. 14. 15. 18. 19. 22. 23. 25
 Total No. of visits 30

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts—Cylinders 7.10.07 Slides 7.10.07 Covers 7.10.07 Pistons 1.10.07 Rods 1.10.07
 Connecting rods 7.10.07 Crank shaft 7.10.07 Thrust shaft 28.8.07 Tunnel shafts ✓ Screw shaft 20.7.07 Propeller 20.7.07
 Stern tube 20.7.07 Steam pipes tested 22.10.07 Engine and boiler seatings 24.7.07 Engines holding down bolts 19.10.07
 Completion of pumping arrangements 23.10.07 Boilers fixed 19.10.07 Engines tried under steam 23.10.07
 Main boiler safety valves adjusted 23.10.07 Thickness of adjusting washers *F3 A 1/2*
 Material of Crank shaft *Iron* Identification Mark on Do. *354 J.H.G 7.10.07* Material of Thrust shaft *Iron* Identification Mark on Do. *354 J.H.G 7.10.07*
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts *Iron* Identification Marks on Do. *354 J.H.G 20.7.07*
 Material of Steam Pipes *Solid drawn copper* Test pressure *360 lbs.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery & trial of this vessel have been completed under Special Survey, and of good make & workmanship, & have been fitted & secured in accordance with the Rules. They are now in good working condition & eligible in my opinion to have the Notation -1- L. M. C. 10.07 in the Register Book.*

It is submitted that this vessel is eligible for REG. RECORD + LMC 10.07

JPM 8/11/07

R.S. 8.11.07

The amount of Entry Fee. £ 7 : : : When applied for.
 Special £ 10 : 1 : : 7/11/07
 Donkey Boiler Fee £ : : : :
 Travelling Expenses (if any) £ : : : :
 When received, 29/11/07

John L. Gwynne
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

TUES. 12 NOV 1907

Assigned

+ L.M.C. 10.07