

# REPORT ON MACHINERY.

No. 19424

Port of Hull

Received at London Office MON. 23 SEP 1907

No. in Survey held at Hull

Date, first Survey Mar 22<sup>nd</sup> Last Survey Sep 9<sup>th</sup> 1907

Reg. Book. 14 Suff on the Trawler "OTHELLO"

(Number of Visits 23)

Gross 205

Net 64

Master Beverly Built at Beverly By whom built Coak, Weetins & Gemmill When built 1907

Engines made at Hull By whom made Amos & Smith when made 1907-9

Boilers made at S. By whom made S. when made S.

Registered Horse Power ✓ Owners Hull's Steam Fishing Co. Port belonging to Hull

Nom. Horse Power as per Section 28 49 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted ✓

## ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 10 x 16 1/2 x 28 Length of Stroke 24 Revs. per minute 100 Dia. of Screw shaft 7 1/2 Material of screw shaft 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 ✓ 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 32

Dia. of Tunnel shaft 6 1/4 Dia. of Crank shaft journals 13 Dia. of Crank pin 6 1/2 Size of Crank webs 18 x 12 1/2 Dia. of thrust shaft under

collars 6 1/4 Dia. of screw 10-0 Pitch of Screw 8-7 1/2 No. of Blades 4 State whether moceable ✓ Total surface 29.8 sq

No. of Feed pumps 1 Diameter of ditto 2 1/2 Stroke 11 Can one be overhauled while the other is at work ✓

No. of Bilge pumps 1 Diameter of ditto 2 1/2 Stroke 11 Can one be overhauled while the other is at work ✓

No. of Donkey Engines 2 Sizes of Pumps 6 x 3 x 6, 5 x 5 x 5 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-2 (Fore & Aft) In Holds, &c. 2-2 (Ballast tank & main hold)

2 1/2" Cyclo suction from air pipe & discharge in hold.

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

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 Under

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 & fuel tank How are they protected Work 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 12/7/07 of Stern Tube 12/7/07 Screw shaft and Propeller 12/7/07

Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

## BOILERS, &c.—(Letter for record ) Manufacturers of Steel Steel Co of Scotland

Total Heating Surface of Boilers 840 sq Is Forced Draft fitted ✓ No. and Description of Boilers 1. S.E. Machinery

Working Pressure 200 Tested by hydraulic pressure to 400 lbs. Date of test 14.8.07 No. of Certificate 1584

Can each boiler be worked separately ✓ Area of fire grate in each boiler 27.3 sq No. and Description of Safety Valves to

each boiler 2 Spring loaded Area of each valve 3.14 sq Pressure to which they are adjusted 200 lbs. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 7 1/2 Mean dia. of boilers 11-0 Length 9-4 Material of shell plates Steel

Thickness 1" Range of tensile strength 28-32 lbs Are the shell plates welded or flanged ✓ Descrip. of riveting: cir. seams S.R. Lap.

long. seams S.R. S. rivet Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 7-6 Lap of plates or width of butt straps 16 1/4

Per centages of strength of longitudinal joint rivets 96.5 plate 85.7 Working pressure of shell by rules 200 lbs. Size of manhole in shell 16 x 12

Size of compensating ring 40 x 30 x 1 No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 3-2 1/2

Length of plain part top 5-8 1/4 bottom 5-2 3/4 Thickness of plates crown 1 1/4 bottom 1 1/4 Description of longitudinal joint welded No. of strengthening rings ✓

Working pressure of furnace by the rules 211 Combustion chamber plates: Material Steel Thickness: Sides 3 3/4 Back 1 1/6 Top 5/8 Bottom 3 3/4

Pitch of stays to ditto: Sides 8 1/2 x 8 1/2 Back 8 1/2 x 7 1/2 Top 8 x 7 1/2 If stays are fitted with nuts or riveted heads None Working pressure by rules 224

Material of stays Steel Diameter at smallest part 1 1/2 Area supported by each stay 72.25 sq Working pressure by rules 258 End plates in steam space:

Material Steel Thickness 1 5/16 Pitch of stays 13 1/4 x 13 How are stays secured S.R. hook Working pressure by rules 242 Material of stays Steel

Diameter at smallest part 4-1 1/2 Area supported by each stay 172 sq Working pressure by rules 238 Material of Front plates at bottom Steel

Thickness 1 5/16 Material of Lower back plate Steel Thickness 1 5/16 Greatest pitch of stays 15 Working pressure of plate by rules 200

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

Pitch across wide water spaces 13 3/4 Working pressures by rules 202 Girders to Chamber tops: Material Iron Depth and

thickness of girder at centre 8 1/2 x 1 1/2 Length as per rule 2-6 7/8 Distance apart 7 1/2 Number and pitch of stays in each 2 x 8

Working pressure by rules 226 Superheater or Steam chest; how connected to boiler None 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 ✓

