

REPORT ON MACHINERY

No. 28510

Received at London Office

SAT. MAY 22 1915

Date of writing Report 20-5-15 When handed in at Local Office

20-5-15 Port of

Hull

No. in Survey held at

Hull

Date, First Survey

July 31/14

Last Survey

3-5-1915

Reg. Book.

05 Supp. on the

Steam trawler

Sir John Jellicoe

(Number of Visits 54

Tons

Gross 351

Net 165

Master

Built at

Beverley

By whom built

Cook, Welton & Gemmell

When built

1915

Engines made at

Hull

By whom made

Amos & Smith. (No 2618)

when made

1915

Boilers made at

Hull

By whom made

Amos & Smith

when made

1915

Registered Horse Power

Owners

Imperial S.F.C. Ltd

Port belonging to

Hull

Nom. Horse Power as per Section 28

87

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, 22½, 37

Length of Stroke

24

Revs. per minute

114

Dia. of Screw shaft

as per rule 7.72
as fitted 8½

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

✓

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

40"

Dia. of Tunnel shaft

as per rule 6.82
as fitted 7½

Dia. of Crank shaft journals

as per rule 7.16
as fitted 7¾

Dia. of Crank pin

7¾

Size of Crank webs

15x4¾

Dia. of thrust shaft under

collars

No. of Feed pumps

1

Diameter of ditto

3"

Stroke

13"

Can one be overhauled while the other is at work

✓

No. of Bilge pumps

1

Diameter of ditto

3"

Stroke

13"

Can one be overhauled while the other is at work

✓

No. of Donkey Engines

241-2½

SIZES OF PUMPS

6x3x6 9 6½x6½x6

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

In Engine Room

two 2" dia.

In Holds, &c.

Forehold, fishroom, & spare

fishroom, each one-2" dia.

Forward & aft slushwells, each one-3" dia.

No. of Bilge Injections

1

size 3"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size 2½" gjetn

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

Forehold suction

How are they protected

wood casings

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

18-9-14

of Stern Tube

18-9-14

Screw shaft and Propeller

18-9-14

Is the Screw Shaft Tunnel watertight

✓

Is it fitted with a watertight door

✓

worked from

✓

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

W. Beardmore & Co. Ltd.

Glasgow.

Total Heating Surface of Boilers

1476 sq

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

12-3-15

No. of Certificate

3065

Can each boiler be worked separately

✓

Area of fire grate in each boiler

48.5 sq

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

49 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

abt 7"

Main dia. of boilers

156"

Length

10-6"

Material of shell plates

steel

Thickness

1½"

Range of tensile strength

29/33 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR.

long. seams

TRDBS

Diameter of rivet holes in long. seams

1¾"

Pitch of rivets

8¾"

Lap of plates or width of butt straps

17¾"

Per centages of strength of longitudinal joint

rivets 87
plate 85.9

Working pressure of shell by rules

201

Size of manhole in shell

12x16"

Size of compensating ring

9x1½"

No. and Description of Furnaces in each boiler

3 plain

Material

S

Outside diameter

38 9/16"

Length of plain part

top 80"
bottom 73"

Thickness of plates

crown 25"
bottom 32"

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

200

Combustion chamber plates: Material

S

Thickness: Sides

11/16"

Back

11/16"

Top

11/16"

Bottom

3/4"

Pitch of stays to ditto: Sides

9½x8"

Back

8¾x8¾"

Top

9¼x8½"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

208

Material of stays

S

Diameter at smallest part

2.070"

Area supported by each stay

78.50"

Working pressure by rules

237

End plates in steam space:

S

Material

S

Thickness

1½"

Pitch of stays

17½x17"

How are stays secured

screwed

Working pressure by rules

201

Material of stays

S

Diameter at smallest part

7.24"

Area supported by each stay

298.0"

Working pressure by rules

252

Material of Front plates at bottom

S

Thickness

1½"

Material of Lower back plate

S

Thickness

15/16"

Greatest pitch of stays

14x8 3/8"

Working pressure of plate by rules

229

Diameter of tubes

3½"

Pitch of tubes

4¾"

Material of tube plates

S

Thickness: Front

1½"

Back

7/8"

Mean pitch of stays

9½"

Pitch across wide water spaces

14"

Working pressures by rules

201 lbs

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9½x1¾"

Length as per rule

34"

Distance apart

9¼"

Number and pitch of stays in each

three 8½"

Working pressure by rules

215

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

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of feed, bilge & air pump valves, one main & one donkey check valve, a quantity of bolts & nuts, & iron of various sizes.*

The foregoing is a correct description,

FOR AMOS & SMITH LTD.

J. Brackenbury

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1914: July 31. Aug 21. 26. 28 Sep 1. 4. 9. 10. 15. 16. 18. 21. 23. 25. Oct 1. 2. 5. 11 Nov. 11. 13. 18.
During erection on board vessel - - 24. 25. Dec 8. 11. 15. 18. 22. 29 1915: Jan 2. 7. 11. 15. 21. 27 Feb 2. 10. 16. 24. 23. Mar 1. 5. 9. 12. 18. 22. 26.
Total No. of visits *54*

Is the approved plan of main boiler forwarded *h* with *Rpt 283*

" " " donkey " " " *✓*

Dates of Examination of principal parts—Cylinders *1-3-15* Slides *12-3-15* Covers *5-3-15* Pistons *9-3-15* Rods *5-3-15*

Connecting rods *5-3-15* Crank shaft *12-3-15* Thrust shaft *11-11-14* Tunnel shafts *12-3-15* Screw shaft *16-9-14* Propeller *18-9-14*

Stern tube *18-9-14* Steam pipes tested *13-4-15* Engine and boiler seatings *18-9-14* Engines holding down bolts *1-4-15*

Completion of pumping arrangements *3-5-15* Boilers fixed *8-4-15* Engines tried under steam *14-4-15*

Main boiler safety valves adjusted *14-4-15* Thickness of adjusting washers *3/8" F & A.*

Material of Crank shaft *Steel* Identification Mark on Do. *12-3-15 PF* Material of Thrust shaft *Steel* Identification Mark on Do. *11-11-14 FLS*

Material of Tunnel shafts *Steel* Identification Marks on Do. *12-3-15 PF* Material of Screw shafts *Iron* Identification Marks on Do. *1272 16-9-14 FLS*

Material of Steam Pipes *S.D. Copper* Test pressure *400 lbs per sq. inch.*

Is an installation fitted for burning oil fuel *✓* Is the flash point of the oil to be used over 150°F. *✓*

Have the requirements of Section 49 of the Rules been complied with *✓*

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Sir John French*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been constructed under special survey in accordance with the approved plans, & the rules of this Society; the materials & workmanship are good, the boilers & steam pipes have been tested as above by hydraulic pressure, & found sound & good. The machinery has been properly fitted & secured on board, & on completion tried under steam & found satisfactory. The safety valves have been adjusted under steam & tested for accumulation, which did not exceed 207 lbs.*

In my opinion the vessel is eligible for the record - LMC 5. 15.

It is submitted that this vessel is eligible for THE RECORD. + LMC 5. 15.

The amount of Entry Fee ... £ *1* : *0* : *0* When applied for, *21. 5. 1915*
Special ... £ *13* : *1* : *0*
Donkey Boiler Fee ... £ : : : When received, *13 31/5/15 16/6/15*
Travelling Expenses (if any) £ : *2* : *0*

Committee's Minute

Assigned

WED. MAY. 26. 1915

+ LMC 5. 15.

P. Fitzgerald
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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Lloyd's Register Foundation

Rpt. 13.

REF

Port of

No. in on the Reg. Book *1058* Built at

Owners *Imperial*

Yard No. *309*

DESCRIPTION OF

One single to a con

Capacity of Dynamo

Where is Dynamo

Position of Main S

Positions of auxili

switches

If fuses are fitted

circuits *✓*

If vessel is wired

Are the fuses of

Are all fuses fitted

are permanent

Are all switches an

Total number of li

A *17*

B *10*

C *7*

D *24*

E *—*

3 Mast head

2 Sid

1

If arc lights, what

Where are the su

DESCRIPTION OF

Main cable carryin

Branch cables carry

Branch cables carry

Leads to lamps car

Cargo light cables co

DESCRIPTION OF

Tulcaniz

armoured

Joints in cables, ho

Are all the joints o

positions, non

Are there any join

How are the cable

clipped to