

# REPORT ON MACHINERY

No. 70199

Received at London Office  
MON. SEP. 10 1917

Date of writing Report 4<sup>th</sup> Sept 1917 When handed in at Local Office 4.9.17 Port of Newcastle-on-Tyne  
No. in Survey held at Newcastle Date, First Survey 12<sup>th</sup> May 1915 Last Survey 28<sup>th</sup> Aug 1917  
Reg. Book. on the s.s. "Beaumont" (Number of Votts 40) Tons <sup>Gross</sup> 2372 <sub>Net</sub> 1460

Master W. J. ... Built at Newcastle By whom built J. S. Cunningham & Co When built 1917

Engines made at Newcastle By whom made J. S. Cunningham & Co when made 1917

Boilers made at do By whom made Palmer & Co when made 1917

Registered Horse Power 232 Owners Furnace Withy & Co Ltd Port belonging to London

Nom. Horse Power as per Section 28 232 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 21" - 34 1/2" - 57" Length of Stroke 39" Revs. per minute 75 Dia. of Screw shaft 11 1/8" Material of screw shaft Iron  
as per rule 11 1/8" as fitted 12"

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 Yes Length of stern bush 4'-0"

Dia. of Tunnel shaft 10 5/8" as per rule 10 5/8" as fitted 10 5/8" Dia. of Crank shaft journals 11 1/4" as per rule 11 1/4" as fitted 11 1/4" Dia. of Crank pin 1 1/4" Size of Crank webs 15"x7" Dia. of thrust shaft under collars 1 1/4" Dia. of screw 14'-6" Pitch of Screw 15'-6" No. of Blades 4 State whether moveable No Total surface 66.5 sq

No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 19 1/2" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3 3/4" Stroke 19 1/2" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 10"x10"x10" & 6"x4"x6" No. and size of Suctions connected to both Bilge and Donkey pumps 2

In Engine Room Four 3" In Holds, &c. Two in each hold 3", one in Lunnel Well 2 1/2"

No. of Bilge Injections 1 sizes 4" Connected to condensers, or to circulating pump Yes 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 None

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 Forward 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 3-3-17 of Stern Tube 3-3-17 Screw shaft and Propeller 3-3-17

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top platform

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

Total Heating Surface of Boilers ... Is Forced Draft fitted ... No. and Description of Boilers ...

Working Pressure ... Tested by hydraulic pressure to ... Date of test ... No. of Certificate ...

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

Smallest distance between boilers or uptakes and bunkers or woodwork ... Mean dia. of boilers ... Length ... Material of shell plates ...

Thickness ... Range of tensile strength ... Are the shell plates welded or flanged ... Descrip. of riveting: cir. seams ...

long. seams ... Diameter of rivet holes in long. seams ... Pitch of rivets ... Lap of plates or width of butt straps ...

Per centages of strength of longitudinal joint ... Working pressure of shell by rules ... Size of manhole in shell ...

Size of compensating ring ... No. and Description of Furnaces in each boiler ... Material ... Outside diameter ...

Length of plain part ... Thickness of plates ... Description of longitudinal joint ... No. of strengthening rings ...

Working pressure of furnace by the rules ... Combustion chamber plates: Material ... Thickness: Sides ... Back ... Top ... Bottom ...

Pitch of stays to ditto: Sides ... Back ... Top ... If stays are fitted with nuts or riveted heads ... Working pressure by rules ...

Material of stays ... Diameter at smallest part ... Area supported by each stay ... Working pressure by rules ... End plates in steam space: ...

Material ... Thickness ... Pitch of stays ... How are stays secured ... Working pressure by rules ... Material of stays ...

Diameter at smallest part ... Area supported by each stay ... Working pressure by rules ... Material of Front plates at bottom ...

Thickness ... Material of Lower back plate ... Thickness ... Greatest pitch of stays ... Working pressure of plate by rules ...

Diameter of tubes ... Pitch of tubes ... Material of tube plates ... Thickness: Front ... Back ... Mean pitch of stays ...

Pitch across wide water spaces ... Working pressures by rules ... Girders to Chamber tops: Material ... Depth and thickness of girder at centre ...

Working pressure by rules ... 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 ...



IS A DONKEY BOILER FITTED? *Yes* If so, is a report now forwarded? *Yes*

SPARE GEAR. State the articles supplied: - *Two top end, two bottom end & two main bearing bolts & nuts, one set of coupling bolts, a set of fresh and bilge pump valves, a quantity of assorted bolts nuts & iron a screw shaft and a propeller.*

The foregoing is a correct description,  
For Jos. T. ELTRINGHAM & Co. Ltd.

*J. Donovan* MANAGER  
ENGINEERING DEPT. Manufacturer.

Dates of Survey while building  
During progress of work in shops - - -  
During erection on board vessel - - -  
Total No. of visits *40*

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

" " " donkey " " " *Yes*

Dates of Examination of principal parts - Cylinders *13.7.17* Slides *7.5.17* Covers *3.3.17* Pistons *14.2.17* Rods *18.4.17*

Connecting rods *8.4.17* Crank shaft *8.8.17* Thrust shaft *4.6.17* Tunnel shafts *9.5.17* Screw shaft *26.1.17* Propeller *26.1.17*

Stern tube *26.1.17* Steam pipes tested *21.8.17* Engine and boiler seatings *14.2.17* Engines holding down bolts *8.8.17*

Completion of pumping arrangements *27.8.17* Boilers fixed *27.8.17* Engines tried under steam *27.8.17*

Main boiler safety valves adjusted *27.8.17* Thickness of adjusting washers *P.B. P 5/16 S 1/32 S.B. P 1/32 S 1/32 J.B. P 5/16 S*

Material of Crank shaft *Steel* Identification Mark on Do. *455NWC* Material of Thrust shaft *Iron* Identification Mark on Do. *J. X. 6-*

Material of Tunnel shafts *Iron* Identification Marks on Do. *J. X. 5-17* Material of Screw shafts *Iron* Identification Marks on Do. *4384 G. d.*

Material of Steam Pipes *Copper* Test pressure *360 lbs*

Is an installation fitted for burning oil fuel *No* 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 *No* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The engines and boilers of this vessel have been constructed under special survey & the material and workmanship are found to be good. The engines have been tried under steam and the safety valves of the main and donkey boilers adjusted. The machinery is now in good and safe working condition & eligible in my opinion to have the notation of + LMC 8.17.*

*A report on the electric installation will be forwarded when received from the Builders*

It is submitted that  
this vessel is eligible for  
THE RECORD. + LMC 8.17.

*J.W.D.*

*J.M.*

*11/9/17*

The amount of Entry Fee ... £2 0 0  
Special ... £31 12 0  
Donkey Boiler Fees ... £10 16 8  
Travelling Expenses (if any) £ ... 22 15 4

When applied for,  
8- SEP 1917

When received,  
22 15 4

*Thomas Field*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute  
Assigned *+ LMC 8.17*

MACHINERY CERTIFICATE  
WRITTEN.



WEB-FRA  
WEB-FRA  
WEB-FRA  
Siz BRACKE Web Fr  
BULKI  
W.T.BUI  
COLL PARTIT LONGIT  
FLAT (U Ba GARB)  
State thick way of Bot  
NEWCASTLE-ON-TYNE  
THE CLE D DBL L POO SHO FOB  
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