

REPORT ON MACHINERY.

No. 284

Received at London Office

FRI. 13 AUG 1909

Date of writing Report Aug 4 1909 When handed in at Local Office Aug 4 1909 Port of NEWPORT NEWS

No. in Survey held at NEWPORT NEWS Date, First Survey DEC 9th 08 Last Survey Aug 3rd 1909

Reg. Book. Sup 3 on the STEEL S.S. "JEAN" (Number of Visits 61) Tons { Gross 3135.98 Net 2391.48 When built 1909-6

Master H. McDONALD Built at NEWPORT NEWS By whom built NEWPORT NEWS S. & I. Co. Engines made at NEWPORT NEWS By whom made NEWPORT NEWS S. & I. Co. when made 1909

Boilers made at " By whom made " when made 1909

Registered Horse Power " Owners A. H. BULL S.S. Co. Port belonging to NEW YORK.

Horse Power as per Section 28 271 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

GINES, &c.—Description of Engines TRIPLE EXPANSION No. of Cylinders 3 No. of Cranks 3

No. of Cylinders 22-37-60 Length of Stroke 42 Revs. per minute 70 Dia. of Screw shaft as per rule 12.62 Material of O.H.S.

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

the propeller boss YES If the liner is in more than one length are the joints burned LAP (BULK) 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 TIGHT. If two

are fitted, is the shaft lapped or protected between the liners YES Length of stern bush 4' 3"

Dia. of Tunnel shaft as per rule 11.19 Dia. of Crank shaft journals as per rule 11.75 Dia. of Crank pin 12 Size of Crank webs 25 1/2 x 8 1/2 Dia. of thrust shaft under

bars 12" Dia. of screw 15 1/2" Pitch of Screw 16 1/2" No. of Blades 4 State whether moveable No Total surface 72 1/4

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

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

No. of Donkey Engines Two Sizes of Pumps 10"x10"x12"- 9x5 1/2 x 10" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room ONE 3 1/2" Two 3" In Holds, &c. No 1; 2-3" No 2; 2-3" No 3; 2-3"

TUNNEL; 1-3"

No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump YES Is a separate Donkey Suction fitted in Engine room & size YES

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 VALVES

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

That pipes are carried through the bunkers NONE How are they protected YES

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 June 19 of Stern Tube June 19 Screw shaft and Propeller June 19

the Screw Shaft Tunnel watertight YES Is it fitted with a watertight door YES worked from Main deck.

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel NORTH BROS., COATESVILLE, PA.

Total Heating Surface of Boilers 4400 Is Forced Draft fitted No No. and Description of Boilers Two, S. E. MULTITUBULAR

Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 19.5.09 No. of Certificate 35

Can each boiler be worked separately YES Area of fire grate in each boiler 74.75 No. and Description of Safety Valves to

each boiler Two - SPRING-LOAD Area of each valve 70" Pressure to which they are adjusted 180 Are they fitted with easing gear YES

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 15' 0" Length 10' 10" Material of shell plates S

Thickness 1 1/4" Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams LAP D.R.

Long. seams D.B.S. TR. Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 7 1/2" Lap of plates or width of butt straps 21"

Percentages of strength of longitudinal joint 88 Working pressure of shell by rules 186 Size of manhole in shell 12" x 16"

Size of compensating ring 31" x 27" No. and Description of Furnaces in each boiler 3, MORISON Material S Outside diameter 50 1/2"

Length of plain part top 19 Thickness of plates crown 19 Description of longitudinal joint WELD No. of strengthening rings YES

Working pressure of furnace by the rules 193 Combustion chamber plates: Material S Thickness: Sides 3/16 Back 3/16 Top 3/16 Bottom 3/16

Pitch of stays to ditto: Sides 7/8 x 7/4 Back 7/8 x 7/4 Top 7/8 x 7/4 If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 194

Material of stays S Diameter at smallest part 1.48 Area supported by each stay 56.25 Working pressure by rules 212 End plates in steam space:

Material S Thickness 1 1/2" Pitch of stays 15 1/2 x 5 1/2 How are stays secured D.N. Working pressure by rules 198 Material of stays S

Diameter at smallest part 25 1/2" Area supported by each stay 240 Working pressure by rules 234 Material of Front plates at bottom S

Thickness 3/4" Material of Lower back plate S Thickness 1/16 Greatest pitch of stays 7 1/2 x 7 1/2 Working pressure of plate by rules 290

Diameter of tubes 3" Pitch of tubes 4 1/2 x 4 Material of tube plates S Thickness: Front 3/4 Back 3/4 Mean pitch of stays 10 3/8

Pitch across wide water spaces 13 1/2 Working pressures by rules 194 Girders to Chamber tops: Material 1 Depth and

Thickness of girder at centre 10 x 3 1/4 Length as per rule 2' 9" Distance apart 7 3/4 Number and pitch of stays in each 3 - 7 1/4"

Working pressure by rules 204 Superheater or Steam chest; how connected to boiler NONE Can the superheater be shut off and the boiler worked

separately YES 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 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:— TAIL SHAFT, 2 CONNECTING ROD TOP
END AND 2 BOTTOM END BOLTS. 2 MAIN BEARING BOLTS. 1 SET OF
COUPLING BOLTS. 1 SET OF FEED AND BILGE VALVES. BOLTS
NUTS AND IRON OF VARIOUS SIZES. CONDENSER TUBES—

The foregoing is a correct description,
NEWPORT NEWS SHIPBUILDING & DRY DOCK CO.
W. A. TAYLOR
Manufacturer.

Dates of Survey while building	During progress of work in shops—	DEC. 9. 15. 18. 19. 28. JAN. 7. 8. 21. 25. FEB. 1. 3. 4. 5. 10. 18. MAR. 3. 4. 8. 10. 11. 12. 16. 19. 22. 26. 29. 30. APRIL. 2. 7. 13. 14. 19. 24. 27. MAY. 4. 7. 8. 11. 14. 18. 21. 25. 26. 27. JUNE 8. 18.
	During erection on board vessel—	JUNE. 22. 25. 29. JULY. 2. 6. 9. 10. 12. 13. 23. 26. 27. 30. 31. AUG. 3.
	Total No. of visits	61

Is the approved plan of main boiler forwarded herewith YES

Dates of Examination of principal parts—	Cylinders	30 th MAR 14 th	Slides	27. APR.	Covers	14. 5.	Pistons	16. 3	Rods	16. 3	
Connecting rods	19. 3	Crank shaft	19. 3	Thrust shaft	19. 3	Tunnel shafts	19. 3	Screw shaft	19. 3	Propeller	6. 5
Stern tube	4. 2.	Steam pipes tested	25 th & 27 th	6. Engine and boiler seatings	12. 7	Engines holding down bolts	2. 7.				
Completion of pumping arrangements	12 th JULY.	Boilers fixed	12 th JULY	Engines tried under steam	9 th JULY						
Main boiler safety valves adjusted	AUGUST 3 rd	Thickness of adjusting washers	LOCK NUTS.								
Material of Crank shaft	S	Identification Mark on Do.	17	Material of Thrust shaft	S	Identification Mark on Do.	17				
Material of Tunnel shafts	S	Identification Marks on Do.	17	Material of Screw shafts	S	Identification Marks on Do.	17.				
Material of Steam Pipes	COPPER	Test pressure	360 LB.								

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 engines and boilers have been
tested under working conditions & found satisfactory
The materials and workmanship all good, and under
the rules eligible in my opinion to have the notation
& LMC 8-09 in the Register Book

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 8.09.

JWD
19/09
APR

The amount of Entry Fee.	£ 10. 00	When applied for,	Aug 4. 1909
Special	£ 167. 75	When received,	11. 8. 09
Donkey Boiler Fee	£ 10. 00		
Travelling Expenses (if any) £	:		

John A. Marsden
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRI. 3 SEP 1909

Assigned

+ Lmc 8. 09

MACHINERY CERTIFICATE
WRITTEN

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Foundation