

REPORT ON MACHINERY.

No. 23122

Port of Sunderland

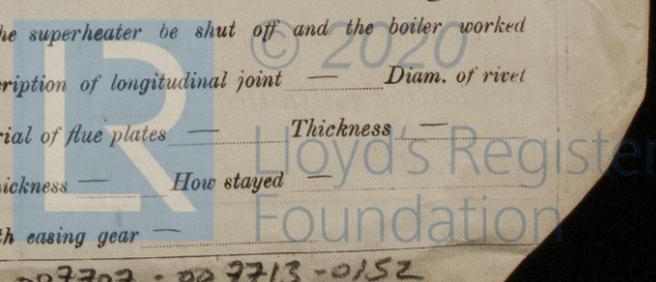
Received at London Office WED. JAN 23 1907

No. in Survey held at Sunderland Date, first Survey 15th September, 06 Last Survey 16th January, 1907.
 Reg. Book. on the Steel Screw Steamer "HOLYWOOD" (Number of Visits 29.)
 Master J. W. Collier. Built at Sunderland By whom built J. Blumer & Co Tons { Gross 1515.50
 Engines made at Sunderland By whom made NE Marine Engineering Co. (Ld.) when made 1904 Net 964.55
 Boilers made at Sunderland By whom made NE Marine Engineering Co. (Ld.) when made 1904 When built 1904
 Registered Horse Power 214 Owners W. France & Enwick Esqs. & Co. Port belonging to London
 Nom. Horse Power as per Section 28 214 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted no.

ENGINES, &c.—Description of Engines Triple Expansion, Inverted No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 20-33-54 Length of Stroke 36 Revs. per minute 48 Dia. of Screw shaft as per rule 12.18 Material of Iron
 as fitted 12.14 screw shaft)
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no liner 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 for protected between the liners — Length of stern bush 4-1/2
 Dia. of Tunnel shaft as per rule 10.12 Dia. of Crank shaft journals as per rule 10.62 Dia. of Crank pin 10.5 Size of Crank webs 6 1/2 x 6 1/2 Dia. of thrust shaft under
 collars 10.5 as fitted 10.1 Dia. of screw 14-6 Pitch of Screw 14-6 No. of Blades four State whether moveable no Total surface 65
 No. of Feed pumps Two Diameter of ditto 3 Stroke 18 Can one be overhauled while the other is at work yes
 No. of Bilge pumps Two Diameter of ditto 3 1/2 Stroke 18 Can one be overhauled while the other is at work yes
 No. of Donkey Engines Two Duplex Sizes of Pumps 4 x 9 x 9 - 5 1/2 x 3 1/2 x 5 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2 1/2 in. pumps, one 2 1/2 Centre In Holds, &c. fore Hold two 2 in. pumps, after Hold two
2 in. pumps, one 2 1/2 Centre
 No. of Bilge Injections two sizes 4 Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2
 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 no
 Are all connections with the sea direct on the skin of the ship yes, except Main 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 none How are they protected —
 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 7/12 13/12 of Stern Tube 7/12 Screw shaft and Propeller 17/12
 Is the Screw Shaft Tunnel watertight yes. Is it fitted with a watertight door yes. worked from top platform.

BOILERS, &c.—(Letter for record S) Manufacturers of Steel J. Spencer & Sons Ld. & W. Piggott & Co
 Total Heating Surface of Boilers 3534 Is Forced Draft fitted no No. and Description of Boilers Two, single ended, cyl. & water
 Working Pressure 190 lb. Tested by hydraulic pressure to 380 lb. Date of test 24/11/06 No. of Certificate 2550
 Can each boiler be worked separately yes. Area of fire grate in each boiler 47 No. and Description of Safety Valves to
 each boiler Two, direct spring Area of each valve 4.91 Pressure to which they are adjusted 195 lb. Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 18 (Rule Mean dia. of boilers 13-3 3/4 Length 10-6 Material of shell plates steel
 Thickness 1 1/8 Range of tensile strength 28 3/4 to 32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams Lap 5R
 long. seams 5RS-TR Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 8 3/4 Lap of plates or width of butt straps 18 1/2
 Per centages of strength of longitudinal joint rivets 88 1/2 Working pressure of shell by rules 192.5 lb. Size of manhole in shell end 16 x 12
 plate 86 1/2
 Size of compensating ring flange No. and Description of Furnaces in each boiler Three plain Material steel Outside diameter 3 1/4
 Length of plain part top 48 3/8 Thickness of plates crown 3 Description of longitudinal joint weld No. of strengthening rings —
 bottom 44 1/2 bottom 14
 Working pressure of furnace by the rules 196 lb. Combustion chamber plates: Material steel Thickness: Sides 3/4 Back 13/16 Top 3/4 Bottom 2/8
 Pitch of stays to ditto: Sides 8 1/2 x 11 1/2 Back 11 1/2 x 11 1/2 Top 8 1/2 x 11 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 190.1 lb
 Material of stays steel Diameter at smallest part 1 1/2 Area supported by each stay 98.114.122 Working pressure by rules 191 lb. End plates in steam space:
 Material steel Thickness 1 3/8 Pitch of stays 18 1/2 x 23 1/2 How are stays secured 5 x 11 Working pressure by rules 200 lb. Material of stays steel
 Diameter at smallest part 3.3 Area supported by each stay 440 Working pressure by rules 193 lb. Material of Front plates at bottom steel
 Thickness 13/16 Material of Lower back plate steel Thickness 29/32 Greatest pitch of stays 14 5/8 x 9 1/8 Working pressure of plate by rules 285 lb
 Diameter of tubes 3 1/4 Pitch of tubes 4 3/4 x 4 1/2 Material of tube plates steel Thickness: Front 13/16 Back 13/16 Mean pitch of stays 10 1/4
 Pitch across wide water spaces 14 1/2 Working pressures by rules 246.0 lb Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 8 1/4 x 2 Length as per rule 28 1/8 Distance apart 11 1/2 Number and pitch of stays in each Two 8 1/2
 Working pressure by rules 194 lb 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 —

If a Report also sent on the Hull of the Ship, one will be sent. If a Report also sent on the Hull of the Ship, one will be sent.



007707 - 007713 - 0152

VERTICAL DONKEY BOILER— Manufacturers of Steel *No Donkey Boiler.*

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 casing 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 _____ Rivets _____ Plates _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____

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:— *one set coupling bolts & nuts, two each top end, bottom end & main bearing bolts & nuts, meset each feed & large pump valves one propeller. & assorted bolt & nuts.*

The foregoing is a correct description,
NORTH EASTERN MARINE ENGINEERING CO. LTD. Manufacturer.
Walter Scott

Dates of Survey while building: During progress of work in shops— *1906: Sept 15, 21, 25, Oct 2, 5, 9, 13, 19, 23, 25, 29, Nov 1, 5, 8, 12, 13, 14, 15, 16, 17, 19, 23, 24, Dec 1, 5, 13, 17, 19, 29.*

During erection on board vessel— *1907: 16 Jan.*

Total No. of visits *29.*

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

“ “ “ donkey “ “ “ *yes*

Dates of Examination of principal parts—Cylinders *19/12 8/11 12/11* Slides — Covers — Pistons *8/11 13/11 17/11* Rods *17/11*

Connecting rods — Crank shaft *8/11 13/11 17/11 19/12* Thrust shaft *19/11 23/11* Tunnel shafts *25/10 3/12 7/12* Screw shaft *8/11 23/11 27/11 3/12* Propeller *23/11*

Stern tube *7/12* Steam pipes tested *19/12* Engine and boiler seatings *19/12* Engines holding down bolts *19/12*

Completion of pumping arrangements *29/12* Boilers fixed *17/12* Engines tried under steam *29/12*

Main boiler safety valves adjusted *29/12* Thickness of adjusting washers *1/2 3/4 1 1 1/2 5/8*

Material of Crank shaft *steel* Identification Mark on Do. *371 D AB* Material of Thrust shaft *steel* Identification Mark on Do. *E 234 PA 10 H 06*

Material of Tunnel shafts *iron* Identification Marks on Do. *372 D AB* Material of Screw shafts *iron* Identification Marks on Do. *366 D AB*

Material of Steam Pipes *copper solid drawn 4 1/4 inch No 6 11 1/2* Test pressure *400 lb.*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey the material & workmanship sound & good, the Boilers & steam pipes have been tested by hydraulic pressure as required by the Rules the machinery worked satisfactorily at the Moorings & the safety valves have been adjusted to their working pressure under steam.

This vessel is eligible in my opinion to have the Notation
** L M C 1.07 in the Register Book.*

It is submitted that
 this vessel is eligible for
 THE RECORD *L.M.C. 1.07.*

The amount of Entry Fee. . . £ *2* : : When applied for, *22.1.07*

Special £ *30* . *14* : : *23.1.07*

Donkey Boiler Fee £ : : When received, *24.1.07*

Travelling Expenses (if any) £ : : *25.1.07*

W. Lloyd
 23.1.07
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute *FRI. JAN 25 1907*

Assigned *+ L.M.C. 1.07.*



Certificate (if required) to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.