

REPORT ON MACHINERY

No. 71243504

Received at London Office *Nov 11 1914* **JAN. 26. 1915**

of writing Report *20 January 1915* When handed in at Local Office *16-1-13* Port of *Antwerp & Hoare* Date, First Survey *16-1-13* Last Survey *27 December 1914*

Survey held at *St. Nazaire & Hoare* on the *Steel Tonnage Steamer "Ohio"* (Number of Visits *59*)

Builder *Arnaud* Built at *Rouen* By whom built *Chantiers de Normandie* Tons *Gross 8178.80 Net 5547.55* When built *1913-14*

Engines made at *St. Nazaire* By whom made *Chantiers de l'Atlantique* when made *1914*

Indicated Horse Power *3800* Owners *Chantiers de Normandie* Port belonging to *Hoare*

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*

Length of Stroke *1295* Revs. per minute *90* Dia. of Screw shaft *380* Material of screw shaft *Steel*

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 *Yes*

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

are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *1.655*

of Tunnel shaft *373* Dia. of Crank shaft journals *370* Dia. of Crank pin *380* Size of Crank webs *241.5* Dia. of thrust shaft under

of Feed pumps *2* Diameter of ditto *110* Stroke *685* Can one be overhauled while the other is at work *Yes*

of Bilge pumps *2* Diameter of ditto *114* Stroke *685* Can one be overhauled while the other is at work *Yes*

of Donkey Engines *three* Sizes of Pumps *10" x 6" and 9" x 6"* No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room *4 of 3 1/2" each* In Holds, &c. *2 of 3 1/2" each hold, 1 on head, 1 on*

of Bilge Injections *6"* Connected to condenser, or to circulating pump *turbine* Is a separate Donkey Suction fitted in Engine room & size *3 1/2"*

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 *Yes*

all connections with the sea direct on the skin of the ship *with bonneted* Are they Valves or Cocks *Both*

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*

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*

at pipes are carried through the bunkers *Suction pipe for hold* How are they protected *by wood casing*

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*

the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*

of examination of completion of fitting of Sea Connections *May 1914* of Stern Tube *May 1914* Screw shaft and Propeller *May 1914*

the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *upper deck by a ratchet*

MANUFACTURERS, &c. — (Letter for record (S)) Manufacturers of Steel *Krupp-Nenschel Sohn - Usines Metall Base Loire*

total Heating Surface of Boilers *900 m²* Is Forced Draft fitted *No* No. and Description of Boilers *4 single end circular*

Working Pressure *13.3 kilo* Tested by hydraulic pressure to *23.3 kilo* Date of test *14-11-13-21-11-13* No. of Certificate *37-38-39-40*

each boiler be worked separately *Yes* Area of fire grate in each boiler *6.66 m²* No. and Description of Safety Valves to

IS A DONKEY BOILER FITTED?

SPARE GEAR. State the articles supplied:—

If so, is a report now forwarded?

The foregoing is a correct description,

(Signed) Chantiers de l'Atlantique Manufacturer.

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

Dates of Examination of principal parts—Cylinders, Slides, Covers, Pistons, Rods, Connecting rods, Crank shaft, Thrust shaft, Tunnel shafts, Screw shaft, Propeller, Stern tube, Steam pipes, Engine and boiler seatings, Engines holding down bolts, Completion of pumping arrangements, Boilers fixed, Engines tried under steam, Main boiler safety valves adjusted, Thickness of adjusting washers, Material of Crank shaft, Identification Mark on Do., Material of Thrust shaft, Identification Mark on Do., Material of Tunnel shafts, Identification Marks on Do., Material of Screw shafts, Identification Marks on Do., Material of Steam Pipes, Steel with riveted flanges, Test pressure, 40 kilos per sq. m., 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. These engines & boilers have been built under special survey in accordance with the Rules & approved plan. The material & workmanship are satisfactory - We are therefore, of opinion, that the machinery is eligible to have the notation LMC in the Register Book. All parts subject to pressure, including cylinders, slide & piston valves, condenser, feed heater, pump chamber valves, drain-cocks, indicator cocks, expansion joints, air vessels, etc. & all boiler mountings, including gauge columns, cocks & glass holders; screws, bins & blow down cocks; feed & stop valves, etc. have been hydraulic-tested to pressure varying from 2 to 28 kilos per sq. m. Machinery is being sent to Rouen to be fitted on board.

Fitting of Engine & Boilers. The setting of engine has been built, as per approved plan, the setting of bearing of Thrust shaft, tunnel shafts built to satisfaction. The Stern tube was fitted & securely fixed. The shafting etc. fitted in place and the propeller put in ready order. All sea connections fitted as per Rules.

The amount of Entry Fee... Donkey Boiler Fee... Travelling Expenses (if any)...

Committee's Minute FRI. MAR. 26. 1915 Assigned + Lmb. 12.14 TUE. JAN. 23. 1915

Port of

Have

Continuation of Report No. 3504 dated

January on the

Steel Screw Steamer "Ohio."

The Boilers - Boilers of 4 Boilers were built solid, and strengthened as necessary. When all organs were fitted and the piping in place, the Boilers have been tested again to 16.50 per cent, and the fixation of the said organs found with good tightness.

When the fitting of engine & Boiler was finished, the Boiler safety valves were adjusted under steam & the washers noted, as above reported. In same time an experiment of engine was made and the result was satisfactory.

Loaminy Engine - When the vessel got down the River Seine for to be placed in dry dock at Havre, the air pump of Main Engine (Edward system) was damaged by the lower part struck (as in my letter of 19th December 1914). The repair was effected by a carpenter in Havre, the work was secured by the "Atelier of Compagnie Generale Transatlantique". The Director of Chantiers de Normandie desires to obtain the worth of repair, as a permanent repair.

The Machinery of this vessel being in good and safe working condition. In my opinion it must for to be classed with the notation LMC 12-14 Records in the Register Book.

Havre January 1915

Cartier

as per Secretary letter of 15th May 1914 amount of the fee = 396 francs paid to London by M. J. J. J.



WS19-0083 1/2