Rpt. 5.

REPORT ON BOILERS.

No. 7165

MON. SEP 24 1906

Port of Antwerp Received at London Office 19

No. in of Safety Reg. Book. Survey held at Seraing & Hoboken Date, first Survey January 26th Last Survey Sept. 12 1906 (Number of Visits 16.) Tons Gross 1619 Net 1060

Supp 2 on the S/S "Witiaz"

Master Markevitz Built at Hoboken By whom built John Cockerill When built 1906

Engines made at Seraing By whom made John Cockerill when made 1906

Boilers made at do. By whom made do. do. when made 1906

~~Registered~~ Nom. Horse Power 262 Owners Soc. Russe d'Assurance et de Transport Port belonging to Odessa

MULTITUBULAR BOILERS—~~MAIN~~, A~~UXILIARY OR~~ **DONKEY.**—Manufacturers of Steel John Cockerill & Thyssen & Duisburger Hütte Wks

(Letter for record S) **Total Heating Surface of Boilers** 527 ☐ft Is forced draft fitted no **No. and Description of Boilers** One single ended **Working Pressure** 170 Tested by hydraulic pressure to 340 Date of test 25.6.06

No. of Certificate 10 Can each boiler be worked separately ✓ **Area of fire grate in each boiler** 18 ☐ft No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 3.14 ☐in Pressure to which they are adjusted 175 lbs ☐in

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 88 5/8 Length 114"

Material of shell plates Steel Thickness 3/4 Range of tensile strength 27-32 Are the shell plates welded or flanged ✓

Descrip. of riveting: cir. seams double long. seams double Diameter of rivet holes in long. seams 29/32 Pitch of rivets 4 11/16

~~Lap of plates or~~ width of butt straps 10" Per centages of strength of longitudinal joint rivets 80 plate 81 Working pressure of shell by rules 190 Size of manhole in shell 15 3/4 × 11 3/4 Size of compensating ring 23 5/8 × 3/4 **No. and Description of Furnaces in each boiler** One Morison Material steel Outside diameter 41 3/8 Length of plain part top ✓ bottom Thickness of plates crown 19/32" bottom

Description of longitudinal joint welded No. of strengthening rings ✓ Working pressure of furnace by the rules 173 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16 Pitch of stays to ditto: Sides 8 Back 8 Top 8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 170 Material of stays steel ~~Diameter~~ area at smallest part 1.48 ☐in Area supported by each stay 64 ☐in Working pressure by rules 184 End plates in steam space: Material Steel Thickness 15/16 Pitch of stays 14 9/16 How are stays secured nuts & washers Working pressure by rules 200 Material of stays steel Diameter at smallest part 2 3/8 Area supported by each stay 240 ☐in Working pressure by rules 210 Material of Front plates at bottom steel Thickness 15/16 Material of Lower back plate steel Thickness 9/16 Greatest pitch of stays 8" Working pressure of plate by rules 170 Diameter of tubes 3" Pitch of tubes 4 1/8 Material of tube plates steel Thickness: Front 15/16 Back 53/64 Mean pitch of stays 8 1/2" Pitch across wide water spaces 12 13/16 Working pressures by rules 170 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 5/8 × 2" Length as per rule 21 5/8 Distance apart 8" Number and pitch of Stays in each 2 - 8"

Working pressure by rules 225 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 — No Steam Chest — 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— No. Description Manufacturers of steel Made at By whom made When made Where fixed Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves No. of safety valves Area of each Pressure to which they are adjusted 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

Soc. Anonyme John Cockerill
Le Secrétaire-Directeur Général.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops - - 1906 January 26. March 13. April 6, 27. June 8, 15. — During erection on board vessel - - - June 25, 26. July 10, 11. August 3, 11, 20, 22. Sept. 8, 12. Total No. of visits 16.

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " " yes.

W660—C120

GENERAL REMARKS *(State quality of workmanship, opinions as to class, &c.*

This boiler has been built under Survey. The materials & workmanship are of good description, it was tested by hydraulic pressure to twice the working pressure & was quite free from leakage.

The Boiler has been fitted on board in accordance with the Rules. The safety valves have been adjusted under steam to blow at 175 lbs per sq. in.

Certificate (if required) to be sent to Antwerp

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

The amount of Entry Fee...	£	:	When applied for,
Special	£	:	Sept 19 19 06
Donkey Boiler Fee ...	£	:	When received,
Travelling Expenses (if any))	£	:	19
= fee.			

Marked on Machinery Report.

H. P. Comick

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUES SEP 25 1906 TUES. SEP 25 1906

Assigned see minute on F.E. report.