t. 4.

REPORT ON MACHINERY. No. 11788

Port of Hamburg Received at London Office 22 DEC 1910 19

No. in Book. Survey held at Breslau + Hamburg Date, first Survey 14th August Last Survey 12th Decbr. 1910 (Number of Visits 10)

on the Steel double Sc. Ferryboat "No 11" Tons Gross 38 Net 9

der — Built at Breslau By whom built Caesar Wollheim When built 1910 12

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stered Horse Power 19 Owners Société de Navigation à vapeur dans la corne d'or Port belonging to Constantinopel

Horse Power as per Section 28 19 ✓ Is Refrigerating Machinery fitted for cargo purposes no ✓ Is Electric Light fitted yes ✓

INES, &c.—Description of Engines compound ✓ No. of Cylinders 2 ✓ No. of Cranks 2 ✓

of Cylinders 8½ + 15" ✓ Length of Stroke 9" ✓ Revs. per minute 85 ✓ Dia. of Screw shaft as per rules ~~3 7/16~~ as fitted 3 9/16 approved Material of screw shaft Steel ✓

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

e propeller boss — If the liner is in more than one length are the joints burned — If the liner does not fit tightly at the part

n the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive — If two

are fitted, is the shaft lapped or protected between the liners — Length of stern bush 13·75"

f Tunnel shaft as per rules ~~3 3/8~~" as fitted 3 3/16" approved Dia. of Crank shaft journals as per rules ~~3 1/2~~" as fitted 3 3/8" approved Dia. of Crank pin 3 3/8" Size of Crank webs 2" x 4 7/8" Dia. of thrust shaft under

s 3 3/8" Dia. of screw 3' 0" Pitch of Screw 4' 11" ✓ No. of Blades 4 ✓ State whether moveable no ✓ Total surface 5·5 sq. ft. ✓

f Feed pumps 1 ✓ Diameter of ditto 1 3/4" ✓ Stroke 4 3/8" ✓ Can one be overhauled while the other is at work —

f Bilge pumps 1 ✓ Diameter of ditto 1 3/4" Stroke 4 3/8" Can one be overhauled while the other is at work —

f Donkey Engines 1 Steampump 1 Injector ✓ Sizes of Pumps Dupl. dble act. 1 3/4" dia. 3" str. No. and size of Suctions connected to both Bilge and Donkey pumps

ngine Room 3 off — 2" 1 Bilge Ejector ✓ In Holds, &c. 2 off — 2" ✓

Bilge Injections 1 ✓ sizes 2" ✓ Connected to ~~condenser, or to~~ circulating pump yes ✓ Is a separate Donkey Suction fitted in Engine room & size no ✓

ll 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 ✓

ll connections with the sea direct on the skin of the ship yes ✓ Are they Valves or Cocks both ✓

ey 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 yes ✓

ey 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 ✓

pipes are carried through the bunkers none ✓ How are they protected —

ll Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes ✓

e 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 18/10. 10 of Stern Tube 18/10. 10 Screw shaft and Propeller 18/10. 10

Screw Shaft Tunnel watertight — Is it fitted with a watertight door — worked from —

ERS, &c.—(Letter for record S ✓) Manufacturers of Steel Gewerkschaft Grillo, Funke + Co., Gelsenk.-Idialke

Heating Surface of Boilers ~~225 sq~~ 430 sq ft ✓ Is Forced Draft fitted no ✓ No. and Description of Boilers 1 single ended multitubular

ing Pressure 170 lbs ✓ Tested by hydraulic pressure to 340 lbs ✓ Date of test 18/10. 10 No. of Certificate 133

ch boiler be worked separately — Area of fire grate in each boiler 13·5 sq. ft. ✓ No. and Description of Safety Valves to

oiler 2 Springloaded ✓ Area of each valve 4·5 sq" ✓ Pressure to which they are adjusted 175 lbs ✓ Are they fitted with easing gear yes ✓

st distance between boilers or uptakes and bunkers or woodwork 8" ✓ Mean dia. of boilers 6' 4·75" (6" 4 3/4") Length 8' 11·5" (8" 11½") Material of shell plates Steel ✓

ess ·56" ·57" Range of tensile strength 28-32 tons Are the shell plates welded or flanged — Descrip. of riveting: cir. seams lap dbl. riv.

eams dbl. butt. quadr. Diameter of rivet holes in long. seams ·85" ·9" ✓ Pitch of rivets 11·18" Lap of plates or width of butt straps 19·12" x ·55"

ntages of strength of longitudinal joint rivets 91·6% plate 92·2% Working pressure of shell by rules 183·5 lbs Size of manhole in shell 15·75" x 11·75"

compensating ring 6" x 1" ✓ No. and Description of Furnaces in each boiler 1 Morrisons Material Steel Outside diameter 33·5"

of plain part top 5" bottom ✓ Thickness of plates crown ·57" bottom ·57" Description of longitudinal joint welded ✓ No. of strengthening rings none

g pressure of furnace by the rules 225·5 lbs. Combustion chamber plates: Material Steel ✓ Thickness: Sides ·626" ✓ Back ·626" Top ·626" Bottom ·626"

f stays to ditto: Sides 7·8" Back 6·3 x 7" Top 7·8" If stays are fitted with nuts or riveted heads nuts + rivets head Working pressure by rules 204·1 lbs

al of stays Steel ✓ Diameter at smallest part 1·5" Area supported by each stay 49 sq in. Working pressure by rules 289·0 lbs End plates in steam space:

al Steel ✓ Thickness ·8" Pitch of stays 14" How are stays secured dbl. nuts + washers Working pressure by rules 180 lbs Material of stays Steel ✓

er at smallest part 2·37" Area supported by each stay 196 sq in. Working pressure by rules 133·4 lbs Material of Front plates at bottom Steel ✓

ess ·9" Material of ~~Lower~~ back plate Steel ✓ Thickness ·8" Greatest pitch of stays 9" ✓ Working pressure of plate by rules 190·9 lbs.

er of tubes 3·4" Pitch of tubes 4·12" Material of tube plates Steel Thickness: Front ·9" Back ·8" Mean pitch of stays 8·3"

across wide water spaces 8·3" 0 Working pressures by rules 298·2 lbs Girders to Chamber tops: Material Steel ✓ Depth and

ss of girder at centre 5·5 x 1·6" ✓ Length as per rule 18·5" Distance apart 7" ✓ Number and pitch of stays in each one ✓

g pressure by rules 192·6 lbs Superheater or Steam chest; how connected to boiler — Can the superheater be shut off and the boiler worked

ly — Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet

— Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —

ned with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —

g pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

W1551-183

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

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 :— 2 Propellers, 2 connecting rod topend bolts & nuts, 2 connecting rod bottom end bolts & nuts, 2 main bearing bolts & nuts, 2 set of coupling bolts, 1 set feed pump valves, 1 set bilge pump valves, 1 set packing rings for each piston, 6 condenser tubes with 12 ferrules, 6 plain tubes for Boiler, 1 set fire bars, various bolts, nuts, iron bar & plates assorted.

The foregoing is a correct description,

ppa. Caesar Wollheim, Werft und Rhederei

Der Director: Albertshaven Manufacturer.

Dates of Survey while building — During progress of work in shops- - 14/8., 19/8., 20/9, 18/10, 1/11., 1910

During erection on board vessel - - 17/11, 5/12, 6/12, 9/12, & 12/12, 1910

Total No. of visits 10 Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 20/9. 10 Slides 20/9. 10 Covers 20/9 10 Pistons 18/10 10 Rods 18/10 10

Connecting rods 24/9 10 Crank shaft 24/9. 10 Thrust shaft 18/10.10 Tunnel shafts 1/11. 10 Screw shaft 1/11. 10 Propeller 1/11. 10

Stern tube 18/10. 10 Steam pipes tested 17/11. 10 Engine and boiler seatings 1/11. 10 Engines holding down bolts 17/11. 10

Completion of pumping arrangements 17/11 10 Boilers fixed 1/11. 10 Engines tried under steam 5/12 . 10

Main boiler safety valves adjusted 9/12 10 Thickness of adjusting washers Stb. 13/32" Port 19/32"

Material of Crank shaft Steel Identification Mark on Do. — Material of Thrust shaft Steel Identification Mark on Do. —

Material of Tunnel shafts Steel Identification Marks on Do. — Material of Screw shafts Steel Identification Marks on Do. —

Material of Steam Pipes Copper Test pressure 340 lbs.

General Remarks (State quality of workmanship, opinions as to class, &c. The Material and workmanship of these Engines and Boiler are of very good description, the outfit is adequate for the intended trade as Ferry boat.

The Material has been tested by the Surveyors to the Society as prescribed by the rules and has been made at Steelworks approved by the Committee.

I attended a satisfactory trial trip on the 5th December 1910.

The Machinery of this vessel having been constructed under Special Survey in accordance with the Rules, I beg to recommend that this vessel be classed and ✠ LMC 12.10 be recorded against her name in the Register Book and a Certificate be issued.

Certificate (if required) to be sent to Hamburg Office

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

The amount of Entry Fee. £. 21.— When applied for, 15/12. 1910

Special .. .. .. £. 336.— When received, 20/12. 1910

Donkey Boiler Fee .. .. £ : :

Travelling Expenses (if any) £ : :

W. Rennoldson.

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

Committee's Minute TUE. 10 JAN 1911

Assigned + LMC. 12.10

MACHINERY CERTIFICATE WRITTEN. 9.1.11