

Rpt. 4.

REPORT ON MACHINERY.

No. 2883
THU AUG. 12 1920Date of writing Report July 17th 1920When handed in at Local Office July 17th 1920

Received at London Office

No. in Survey held at

Baltimore, Md.

Port of Baltimore, Md.

Reg. Book.

Date, First Survey Nov. 3rd 1919Last Survey June 30th 1920

4970 on the Steamer John. B. Gibbons

(Number of Visits)

Gross 3212

Master Ruddeck

Built at Baltimore, Md.

By whom built Union Shipbuilding Co.

Tons Net 1214

Engines made at Baltimore, Md.

By whom made

Ellicott Machine Corporation

When built 1920

Boilers made at Wilmington Del.

By whom made

Bethlehem S. B. Corp. Harlan Plant.

when made 1920

Registered Horse Power

Owners

American Bauxite Co.

Port belonging to

Philadelphia

Nom. Horse Power as per Section 28

310. 300

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple Expansion Reciprocating

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 32"-37½"-60"

Length of Stroke 42

Revs. per minute 80

Dia. of Screw shaft

as per rule 12.12

Material of

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

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

If two

ers are fitted, is the shaft lapped or protected between the liners

Dia. of Tunnel shaft

as per rule 11.3

as fitted 11.5

Dia. of Crank shaft journals

as per rule 11.8

as fitted 12.25

Dia. of Crank pin 12.25

Size of Crank webs 24" x 8½"

Dia. of thrust shaft under

bars 12.25

Dia. of screw 15-6

Pitch of Screw 15-6

No. of Blades 4

State whether moveable

yes

Total surface

70 sq ft

No. of Feed pumps 2

Diameter of ditto 4"

Stroke 13"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 2

Diameter of ditto 4"

Stroke 13"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines 4

SIZES OF PUMPS

6" x 5¾" x 6"

10" x 10 x 12"

9" x 6" x 10"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Holds, &c. 4-3½" forward

2-3½" aft

Engine Room 4-3½"

In tunnel 3-3½"

No. of Bilge Injections 1

sizes 8"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes

3½"

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

yes

Are all connections with the sea direct on the skin of the ship

yes

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

both

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

Are all pipes carried through the bunkers

bilge pipes to forward hold

How are they protected

lumber boards

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

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

top platform of Engine Room

MILERS, &c.—(Letter for record)

Manufacturers of Steel

Please see Philadelphia Report No. 2927

Is Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

Is boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

In seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Percentages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

No. of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

Thickness of plates

crown

Description of longitudinal joint

bottom

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space:

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

Thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% of strength of joint

Material

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Foundation

Pitch of Test

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

Is Easing Gear fitted

IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—

*1 Propeller shaft, 1 set crank pin bearings with bolts
nuts, 4 crosshead bolts nuts, 3 main bearing bolts nuts, 1 set coupling bolts
1 L. P. piston spring ring, 2 spring rings each for HP & IP pistons, 1 Spring for each
relief valve fitted, 1 safety valve spring, 1 set feed pump valves, 1 set bilge pump valves
1 eccentric strap, 6 junk ring bolts, 6 cylinder cover and 6 steam chest studs nuts,
Assorted bolts nuts, sheet and bar iron*

The foregoing is a correct description,

UNION SHIPBUILDING CO.

W.A. Blakeman

Manufacturer.

Dates of Survey while building { During progress of work in shops -- *Nov. 3rd 6th Dec. 2-3-30th Jan 15th + 28th 1920.*
During erection on board vessel -- *Nov. 3rd March 2nd 22nd Apr. 9th 29th May 6th June 10 - 29-30*
Total No. of visits *16.*

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

Dates of Examination of principal parts—Cylinders *Jan 15th* Slides *Nov 3rd* Covers *Jan 15th* Pistons *Dec 2nd* Rods *Dec 2nd*
Connecting rods *Dec 3rd* Crank shaft *Dec 3rd* Thrust shaft *Dec 30th* Tunnel shafts *Dec 30th* Screw shaft *Dec 30th* Propeller *Dec 30th*
Stern tube *Jan 15th* Steam pipes tested *June 10th* Engine and boiler seatings *Apr 29th* Engines holding down bolts *Apr 29th*
Completion of pumping arrangements *June 10th* Boilers fixed *June 10th* Engines tried under steam *June 29th*
Completion of fitting sea connections *Mar 22nd* Stern tube *Mar 22nd* Screw shaft and propeller *Mar 24th*
Main boiler safety valves adjusted *29. 6. 20.* Thickness of adjusting washers *F 7/16" & 1 1/2" F 1 1/2" & 1 1/2"*
Material of Crank shaft *S* Identification Mark on Do. Material of Thrust shaft *S* Identification Mark on Do.
Material of Tunnel shafts *S* Identification Marks on Do. Material of Screw shafts *S* Identification Marks on Do.
Material of Steam Pipes *Copper* Test pressure *465 lbs. by U.S. Local Inspectors.*
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 *yes.* If so, state name of vessel *S.S. George B. Mackenzie*

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

Machinery has been built under special survey from approved plans, and from tested materials. Workmanship and materials are good. Installed in the vessel in an efficient manner, tried out under steam and found to work in satisfactory manner. Safety valves adjusted under steam pressure to 185 lbs.

*The machinery in this vessel is eligible in my opinion to have notation in the register book. * L.M.C. 20. - Electric light.*

It is submitted that this vessel is eligible for THE RECORD +, L.M.C. 6.20

Bel 18/8/20

JRS

The amount of Entry Fee ... £ *15.00.00* When applied for, *July 15th 1920*
Special ... £ *Bills 16.67 Phila 58.30*
Donkey Boiler Fee ... £ *Bills 10.00 Phila 2.50*
Travelling Expenses (if any) £ *Bills 10.00 Phila 2.50* When received, *30/9/20*

John M. Sheriff

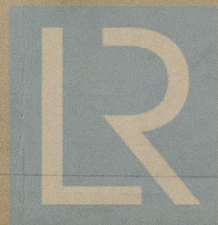
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

New York JUL 27 1920

Assigned *+ L.M.C. 6.20*

MACHINERY CERT. 12.8.20



© 2019

Lloyd's Register Foundation