

# REPORT ON MACHINERY.

No. 15111

of writing Report *May 1918* When handed in at Local Office *May 1918* Port of *New York*

in Survey held at *Shore's Island New York* Date, First Survey *6 Oct 1918* Last Survey *4 June 1918*

Book. *on the Machinery for the S/S "PASSAIC"* (Number of Vents *31*)

ster Built at *Shore's Island N.Y.* By whom built *Standard S.B. Corp.* Tons } Gross  
 } Net  
When built *1918-5*

ines made at *Shore's Island N.Y.* By whom made *Standard S.B. Corp.* when made *1918-5*

ilers made at *Shore's Island N.Y.* By whom made *Standard S.B. Corp.* when made *1918-5*

gistered Horse Power *485* Owners *U.S. Shipping Board* Port belonging to *New York*

n. Horse Power as per Section 28 *485* Is Refrigerating Machinery fitted for cargo purposes *Yes* Is Electric Light fitted *Yes*

INES, &c.—Description of Engines *Triple Expansion Surface Condensing* No. of Cylinders *3* No. of Cranks *3*

of Cylinders *24-40-70* Length of Stroke *48"* Revs. per minute *75* Dia. of Screw shaft *13-23* Material of *Steel*

he 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

he 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

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

s are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *4'-11 1/2"*

of Tunnel shaft *12-67* Dia. of Crank shaft journals *13-3* Dia. of Crank pin *13 3/8* Size of Crank webs *26 x 10 5/8* Dia. of thrust shaft under

ers *13 3/8* Dia. of screw *16-6* Pitch of Screw *17-4 1/2* No. of Blades *4* State whether moveable *No* Total surface *82 #*

of Feed pumps *2* Diameter of ditto *4* Stroke *20* Can one be overhauled while the other is at work *Yes*

of Bilge pumps *2* Diameter of ditto *5* Stroke *20* Can one be overhauled while the other is at work *Yes*

of Donkey Engines *5* Sizes of Pumps *12 x 24, 12 x 14 x 15, 12 x 12 x 12* No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room *2-3 1/2* In Holds, &c. *No. 1. 2-3 1/2 No. 2. 2-3 1/2 No. 3. 2-3 1/2*

*2-3 1/2 No. 5. 2-3 1/2* Tunnel *Med 1-2 1/2 and 6-3 1/2* *Donkey, Bilge Suctions - Screwdown non-return*

of Bilge Injections *1* sizes *8"* Connected to condenser, or to circulating pump *Yes* Is a separate Donkey Suction fitted in Engine room & size *Yes 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 *Yes* 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*

hat pipes are carried through the bunkers *None* How are they protected *Yes*

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*

the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Crewman platform.*

ILERS, &c.—(Letter for record *S*) Manufacturers of Steel *Centric Iron & Steel Co. Harrisburg, Pa.*

atal Heating Surface of Boilers *712 #* Is Forced Draft fitted *Yes* No. and Description of Boilers *3, Single ended*

orking Pressure *190 lbs.* Tested by hydraulic pressure to *285 lbs.* Date of test *8/10/18* No. of Certificate *31*

in each boiler be worked separately *Yes* Area of fire grate in each boiler *62 #* No. and Description of Safety Valves *to*

h boiler *2, Spring loaded* Area of each valve *12.56 #* Pressure to which they are adjusted *190 lbs.* Are they fitted with easing gear *Yes*

allest distance between boilers or uptakes and bunkers *15"* Mean dia. of boilers *4'-2 3/4* Length *12'-0* Material of shell plates *Steel*

ickness *1/2 1/4* Range of tensile strength *28,320 lbs.* Are the shell plates welded or flanged *No* Descrip. of riveting: cir. seams *D.R.L.A.P.*

g. seams *T.R.D.B.S.* Diameter of rivet holes in long. seams *1/2* Pitch of rivets *8 1/2* Top of plates or width of butt straps *23"*

er centages of strength of longitudinal joint *82.5* Working pressure of shell by rules *204 lbs.* Size of manhole in shell *16 x 12"*

ize of compensating ring *38 x 34 x 1/2* No. and Description of Furnaces in each boiler *3, Motion* Material *Steel* Outside diameter *46 3/8*

ength of plain part *top 19 1/2 bottom 19 1/2* Thickness of plates *bottom 3/32* Description of longitudinal joint *Welded* No. of strengthening rings *1*

orking pressure of furnace by the rules *204* Combustion chamber plates: Material *Steel* Thickness: Sides *5/8* Back *5/8* Top *9/16* Bottom *7/8*

itch of stays to ditto: Sides *8" x 7* Back *7 1/4 x 6* Top *7 1/2 x 7* If stays are fitted with nuts or riveted heads *None* Working pressure by rules *204 lbs.*

aterial of stays *Steel* Area at smallest part *1-48 #* Area supported by each stay *46.5 #* Working pressure by rules *255* End plates in steam space:

aterial *Steel* Thickness *1/16* Pitch of stays *14 x 14* How are stays secured *D. Nuts* Working pressure by rules *257* Material of stays *Steel*

rea at smallest part *5.93 #* Area supported by each stay *196 #* Working pressure by rules *316* Material of Front plates at bottom *Steel*

Thickness *3/4* Material of Lower back plate *Steel* Thickness *3/4 9/16* Greatest pitch of stays *13 3/8* Working pressure of plate by rules *352*

iameter of tubes *3* Pitch of tubes *4 1/4 x 4* Material of tube plates *Steel* Thickness: Front *3/4 9/16* Back *3/4* Mean pitch of stays *8 1/4*

itch across wide water spaces *14* Working pressures by rules *230 lbs.* Girders to Chamber tops: Material *Steel* Depth and

ickness of girder at centre *10 x 1 1/2* Length as per rule *35 3/8* Distance apart *7* Number and pitch of stays in each *3-7 1/2*

orking pressure by rules *231* Steam dome: description of joint to shell *Not fitted* % of strength of joint

Diameter 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

UPERHEATER. Type *Not fitted* Date of Approval of Plan Tested by Hydraulic Pressure to

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

iameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

STANDARD S.B. 11-3



IS A DONKEY BOILER FITTED? No. ✓

*If so, is a report now forwarded?*

SPARE GEAR. State the articles supplied:— 2 top end bolts & nuts: 2 bottom end bolts & nuts: 2 main bearing bolts & nuts: Set of coupling bolts & nuts: 4 feed pump valves & seats: 2 bilge pump valves & seats: one propeller: propeller shaft: one two throw crank shaft: 12 air pump valves: 2 propeller keys: one set of top end braces: one bottom end brace: one set of link braces: one eccentric strap: one air pump rod: one H.P. Valve spindle: one set of metallic packing for H.P. piston rod & H.P. Valve spindle: 25 Condenser Tubes: 36 boiler tubes: 37 piston springs: a quantity of assorted bolts & nuts bar iron of various sizes & a considerable quantity of hand tools.

*The foregoing is a correct description,*

Am. & Eng. Shipbldg. Co. v.

*Wm. H. Hart, Ch. Engineer.* Manufacturer.

Dates of Survey while building	During progress of work in shops --	1916: Oct 6, 20 Dec 8 1917 Apr 16, 25 May 4, 16 June 21 July 26 Aug 1, 20 Sept 1 Oct 17, 21 Nov 12, 21, 26, 30 Dec 3, 6, 7, 10, 13, 18
	During erection on board vessel --	26, 27 1918 Jan 14, 18, 19, 21, 22, 24 Feb 5, 11 Mar 5, 11, 15, 21, 27, 29 Apr 2, 8, 12, 23, 24, 30 May 21 June 14
	Total No. of visits	51

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

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 2/6/17 Slides 24/7/17 Covers 24/7/17 Pistons 1/8/17 Rods 20/8/17  
 Connecting rods 17/10/17 Crank shaft 25/11/18 Thrust shaft 26/11/17 Tunnel shafts 1/8/18 Screw shaft 2/11/17 Propeller 2/11/17  
 Stern tube 1/8/17 Steam pipes tested 11/2/18 ~~Engine and~~ boiler seatings 1/8/18 Engines holding down bolts 18/1/18  
 Completion of pumping arrangements 24/4/18 Boilers fixed 11/2/18 Engines tried under steam 24/4/18  
 Completion of fitting sea connections 10/12/18 Stern tube 1/8/17 Screw shaft and propeller 26/12/17  
 Main boiler safety valves adjusted 23/4/18 Thickness of adjusting washers P.B. F.V. 7/16" A.V. 1/32" C.B. F. 1/16" A. 1/32" P.B. F. 1/16" A. 1/32"  
 Material of Crank shaft Steel Identification Mark on Do. 380 Material of Thrust shaft Steel Identification Mark on Do. 380  
 Material of Tunnel shafts Steel Identification Marks on Do. 380 Material of Screw shafts Steel Identification Marks on Do. 380  
 Material of Steam Pipes Lap Welded Steel ✓ Test pressure 570 lbs per sq. in. ✓  
 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. M. Watson N. Y. City 14023

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

The Machinery and Boilers of this Vessel have been built under Special Survey and in accordance with the Rules and approved plans. The materials have been tested, found efficient and the workmanship is good. They have now been efficiently fitted on board and tested under strain with satisfactory results. The case is respectfully submitted for the notation of.

✠ L.M.C. 5-18 in the Register Book.

It is submitted that  
this vessel is eligible for  
THE RECORD. + LMC 6.18. F.D.

The amount of Entry Fee	...	\$ 15.00	:	When applied for,	
Special	...	\$ 221.25	:	7 June	19 18
Donkey Boiler Fee	...	£	:	When received,	
Travelling Expenses (if any)	£	:	:	24 June	19 18

*Engineer Surveyor to Lloyd's Register of Shipping.*

## Committee's Minute

New York JUN 11 1918

*Assigned*

5/18  
Elec. Light

Vertical scale (if required) to be sent to  
not to write on or below the space for Committee's Minute.)

© 2020

Lloyd's Register  
Foundation