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REPORT ON MACHINERY.

No. 15681

NEW YORK, Dec. 13, 1919. Received at London Office Dec. 15, 1919.

Writing Report 6th Dec. 1919 When handed in at Local Office 13th Dec. 1919 Port of Jacksonville, Fla.

in Survey held at Jacksonville, Fla. Date, First Survey 19th May Last Survey 2nd December 1919

g. Book. on the Single Screw Steel Steamer "JACKSONVILLE" (Number of Visits 70) Gross 3853-87 Tons Net 2376

ster A. J. Pollard Built at Jacksonville, Fla. By whom built Merrill Stevens S. B. Corp. When built 1919

ines made at Hoboken N. J. By whom made W. A. Fletcher Co. (Engs. No. 243) when made 1918

ilers made at Philadelphia By whom made Badenhausen Co. when made 1918

istered Horse Power Owners U. S. Shipping Board (Emer. Fleet Corp) Port belonging to Jacksonville, Fla.

ft Horse Power at Full Power 2000 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

BINE ENGINES, &c.—Description of Engines *Parsons Reaction Geared Turbine* No. of Turbines 2

eter of Rotor Shaft Journals, H.P. 3 1/2" L.P. 4 1/2" Diameter of Pinion Shaft

eter of Journals Distance between Centres of Bearings Diameter of Pitch Circle

eter of Wheel Shaft Distance between Centres of Bearings Diameter of Pitch Circle of Wheel

h of Face Diameter of Thrust Shaft under Collar 20" *Kinghorn* Diameter of Tunnel Shaft as per rule 11 3/8" as fitted 11 5/8"

of Screw Shafts one Diameter of same as per rule 12 8/5 C.L. as fitted 13" Diameter of Propeller 15'-6" Pitch of Propeller 13'-4"

of Blades 4 State whether Moveable No Total Surface Diameter of Rotor Drum, H.P. 11 1/2" L.P. 20" astern 13"

kness at Bottom of Groove, H.P. Solid L.P. Solid Astern Solid Revs. per Minute at Full Power, Turbine 3600 Propeller 90

PARTICULARS OF BLADING.

	H. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION	5 1/2"	12 1/4"	6	2 3/8"	2'-0 1/4"	2	5 1/6"	15 7/8"	3
"	5 1/8"	12 5/8"	6	2 5/8"	2'-1 1/4"	2	5 3/8"	14 1/4"	3
"	1 1/2"	13 1/8"	6	3 1/4"	2'-2 1/2"	2	1 3/8"	15 3/4"	3
"	1 3/8"	13 3/4"	6	4"	2'-4"	2	3"	19"	2
"	1"	17"	5	5"	2'-6"	2	3"	19"	2
"	1 3/8"	17 5/8"	3	5"	2'-8"	2			
"	1 1/4"	18 3/8"	3	5"	2'-8"	1			
"	2 3/8"	19 1/4"	3	5"	2'-6"	1			

and size of Feed pumps *Two 12" x 8" x 12" Vertical simplex Worthington*

and size of Bilge pumps *One 6" x 5 3/4" x 6" long duplex One 10" x 6" x 10" long duplex One 10" x 10 1/4" x 1 1/2" horizontal duplex*

and size of Bilge suction in Engine Room *Three 3 1/2" & Three 3"*

In Holds, &c. *None 3 1/2" & one 3"*

of Bilge Injections *one* 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*

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

they sized 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 *none* How are they protected

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 *Upper deck*

ERS, &c.—(Letter for record) Manufacturers of Steel

al Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

king Pressure Tested by hydraulic pressure to 400 lbs. Date of test 16th Oct 1919 No. of Certificate

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

boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Best distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

kness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

centages of strength of longitudinal joint plates Working pressure of shell by rules Size of manhole in shell

of compensating ring *None* Description of Furnaces in each Boiler Material Outside diameter

top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

bottom Thickness of plates bottom

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

h of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

erial of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space

erial Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

eter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

kness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

eter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

h across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

ness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

king pressure by rules Steam dome: description of joint to shell % of strength of joint Diameter

kness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets

king pressure of shell by rules Crown plates: Thickness How stayed

SUPERHEATER. Type _____ 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 _____

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

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— 2 Bolts & nuts (in studs & nuts) for each size of rotor bearing, Main gear wheel bearing, 47 oil cooler tubes; 94 oil cooler tube ferrules; 150 ft packing strip; 25 ft packing strip (gland); 1 set of coupling bolts & nuts for main shaft; Int. Sear wheel bearing, Pinion bearing; 20 total bolts & nuts for Sear Case joint & Turbine Case joint; 2 Thermometers for oil circ. system; 1 Template for propeller shaft cap; 1 Acetate rule & bolts; 36 brass children's table ferrules; 1 set of brushes for generator; 1 pair bearing outer of bearing bushes for main Sear wheel bearing; Int. Sear wheel bearing, Pinion gear wheel bearing, Rotor gear wheel bearing; 2 packing rings generator engine; 1 pair bearing bushes for arcuate engine; 1 set of bearing bushes for Condensate pump engine; 1 set bearing bushes for Perry generator set; each gland of rotor shaft; 2 Ordinary Thrust shoes; Turbine thrust and adjusting bushes with ring complete; 1 set of liners for adjusting block; 1 set of 1/2 set of studs; guards, seat springs & valves for Air feed, Air Circulator, Bilge, Ballast, Long Room Lids; feed water, sanding, Turbine feed, Cooling water; 2 Lab. oil, 2 studs & handle for lab. oil pump, feed pump; 1 bucket & rod for lab. oil pump; 1 escape valve spring of each size fitted; 1 High speed pinion & shaft; 1 Int. pinion & shaft; 2 safety valve springs; 2 valves for checks; 2 oil burners complete; 6 burner tips; 2 studs & nuts for rotor bearing; 2 bolts & nuts in H.P. turbine case (small & large) also 2 studs & nuts for same; 2 bolts & nuts & 2 studs & nuts for L.P. turbine case; 4 studs for L.P. turbine case; 1 set complete bearings for H.P. & L.P. Rotor; 6 pads on 1 face of turbine thrust; 1 set of 8 fixed bolts for 360 complete for

The foregoing is a correct description,

W. T. T. Co

Manufacturer.

Andrew T. T. Co
as above New York

Dates of Survey while building
During progress of work in shops -- 1918 Jan 25-26 Feb 26 Mar 13 April 26 May 2-3 6-13 14-21 24 Jun 3-6 13-17 25-26 July 18-19 22-30
During erection on board vessel -- May 19-23 27-30 June 4-10 13-16 18-20 24-28 July 2-7 10-15 17-19 21-22 24-25 28-31 Aug 2-4 6-9 12-13 14-15 19-23 26-30 Sept 2-5 9-11 14-19 22-23 24-25 28-30
Total No. of visits 131 94 21 23 24 30 Nov 4-10 22 24 26 29 Dec 2

Is the approved plan of main boiler forwarded herewith ✓

Dates of Examination of principal parts—Casings 17th April Rotors 1st Sept Blading 25th June Gearing donkey

Rotor shaft 26th Feb. Thrust shaft Tunnel shafts 16th Oct 1919 Screw shaft 23rd August 1919 Propeller 30th August

Stern tube 30th August 1919 Steam pipes tested 27th Sept 1919 Engine and boiler seatings 24th June 1919 Engines holding down bolts 26th August

Completion of pumping arrangements 23rd Oct 1919 Boilers fixed 16th Oct 1919 Engines tried under steam 23rd Oct 1919

Main boiler safety valves adjusted 2nd December 1919 Thickness of adjusting washers ✓

Material and tensile strength of Rotor shaft Seimens O.H. Steel 28 5/8" diam. Identification Mark on Do. 2494 W.H.S.

Material and tensile strength of Pinion shaft O.H. Steel Identification Mark on Do. ✓

Material of Wheel shaft O.H. Steel Identification Mark on Do. ✓ Material of Thrust shaft Identification Mark on Do. ✓

Material of Tunnel shafts O.H. Steel Identification Marks on Do. A.B. 112. LLOYD 519 FHO Material of Screw shafts O.H. Steel Identification Marks on Do. A.B. 112. LLOYD 519 FHO

Material of Steam Pipes Steel Test pressure 600 lbs.

Is an installation fitted for burning oil fuel Yes. Is the flash point of the oil to be used over 150°F. Yes.

Have the requirements of Section 49 of the Rules been complied with Yes.

Is this machinery a duplicate of a previous case No If so, state name of vessel ✓

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

Manilla Stevens Co.

Jack

The above machinery has been satisfactorily installed on board and has been tried under working conditions. Safety valves have been adjusted under steam to 200 lbs. It is submitted that this vessel is eligible for 2 STEAM TURBINES GEARED TO 1 SCREW SHAFT. THE RECORD L.M.C. 12-19 F.D. 2 WATER TUBE BOILERS. FITTED FOR OIL FUEL 12-19 F.P. ABOVE 150°F.

The amount of Entry Fee ... £ 1/2 due
Special ... £ 211.00
Donkey Boiler Fee ... £ New York
Travelling Expenses (if any) £ 27/2/1920

When applied for, 2nd Dec. 1919

When received, 27/2/1920

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York DEC 23 1919

Assigned L.M.C. 12.19

MACHINERY CERT.
WRITTEN 6-1-20



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Foundation