

# REPORT ON MACHINERY.

No. 1060

REC'D NEW YORK

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Report made on Dec 1<sup>st</sup> 1916 When handed in at Local Office Dec 1<sup>st</sup> 1916 Port of Newport-Hawt  
 Survey held at Newport-Hawt Date, First Survey Dec 8<sup>th</sup> 1915 Last Survey Nov. 29<sup>th</sup> 1916  
 the STEEL S.S. "WILLIAM A. MCKENNEY" (Number of Plates 64) Gross 6256  
 J. VAIL Built at Newport-Hawt By whom built Newport-Hawt S & D Co Tons Net 4544  
 at Newport-Hawt By whom made Newport-Hawt S & D Co when made 1916  
 at Newport-Hawt By whom made Newport-Hawt S & D Co when made 1916  
 Horse Power 467 Owners Crowell & Thurlow S & D Co Port belonging to Boston  
 Is Electric Light fitted YES

Power as per Section 28 467 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

ES, &c. — Description of Engines TRIPLE EXPANSION No. of Cylinders 3 No. of Cranks 3

Cylinders 24 1/2 - 41 1/2 - 72 Length of Stroke 48 Revs. per minute 68 Dia. of Screw shaft 14 1/2 as per rule 14 1/2 Material of screw shaft O.H.S.

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

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

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

are fitted, is the shaft lapped or protected between the liners YES Length of stern bush 60"

Tunnel shaft as per rule 12 65 Dia. of Crank shaft journals as per rule 13 28 Dia. of Crank pin 14 3/8 Size of Crank webs 28 3/4 Dia. of thrust shaft under

14 Dia. of screw 17 0 Pitch of Screw 17 6 1/2 No. of Blades 4 State whether moveable YES Total surface 98.4 sq. ft.

Feed pumps 2 Diameter of ditto 4 Stroke 21 Can one be overhauled while the other is at work YES

Bilge pumps 2 Diameter of ditto 5 Stroke 21 Can one be overhauled while the other is at work YES

of Donkey Engines 3 Sizes of Pumps 12x14x12-10x7x10 No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room FOUR 3 1/2 - ONE 3" In Holds, &c. No 1 - ONE 4" No 2 - ONE 4"

No 3 - ONE 3 1/2" No 4 - TWO 3"

of Bilge Injections 1 size 9" 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 NONE

all connections with the sea direct on the skin of the ship YES Are they Valves or Cocks VALVES

are 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 YES

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

What pipes are carried through the bunkers HOLD SUCTIONS How are they protected IRON COVERS

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

Dates of examination of completion of fitting of Sea Connections 22.10.16 of Stern Tube 22.10.16 Screw shaft and Propeller 28.10.16

Is the Screw Shaft Tunnel watertight YES Is it fitted with a watertight door YES worked from U. Deck

BOILERS, &c. — (Letter for record S) Manufacturers of Steel LUKENS & S. NORTH BROS. (CARNEGIE STEEL CO.)

Total Heating Surface of Boilers 8235 Is Forced Draft fitted No No. and Description of Boilers 3 SCOTCH

Working Pressure 180 Tested by hydraulic pressure to 270 Date of test Jun 23-29/17 No. of Certificate 151-2-3

Can each boiler be worked separately YES Area of fire grate in each boiler 80 sq. ft. No. and Description of Safety Valves to

each boiler TWO 3" SPRING Area of each valve 7.07 Pressure to which they are adjusted 180 Are they fitted with easing gear YES

Smallest distance between boilers or uptakes and bunkers or woodwork 36" Mean dia. of boilers 15.9" Length 11'6" Material of shell plates S

Thickness 1 3/8" Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L.D.R.

long. seams 1/8" Diameter of rivet holes in long. seams 1 7/16" Pitch of rivets 8 1/4" Lap of plates or width of butt straps 21"

Per centages of strength of longitudinal joint rivets 102.8 plate 82.6 Working pressure of shell by rules 195 Size of manhole in shell 16x12

Size of compensating ring 38x34 No. and Description of Furnaces in each boiler 4 MORISON Material S Outside diameter 44 1/2

Length of plain part top Thickness of plates crown 1 1/2 bottom 3/2 Description of longitudinal joint WELD No. of strengthening rings

Working pressure of furnaces by the rules 185 Combustion chamber plates: Material S Thickness: Sides 9/16 Back 9/16 Top 5/8 Bottom 7/8

Pitch of stays to ditto: Sides 7x7 Back 7x7 1/2 Top 7x8 If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 213

Material of stays S Diameter at smallest part 1 1/2 Area supported by each stay 56 Working pressure by rules 210 End plates in steam space:

Material S Thickness 1 3/2 Pitch of stays 15x16 How are stays secured I.R. Working pressure by rules 194 Material of stays S

Diameter at smallest part 2 1/2 Area supported by each stay 740 Working pressure by rules 215 Material of Front plates at bottom S

Thickness 3/4 Material of Lower back plate S Thickness 3/4 Greatest pitch of stays 7x7 1/2 Working pressure of plate by rules 370

Diameter of tubes 3 Pitch of tubes 4 1/4 x 4 Material of tube plates S Thickness: Front 3/4 Back 3/4 Mean pitch of stays 10 5/8 x 8

Pitch across wide water spaces 13 1/2 Working pressure by rules 187 Girders to Chamber tops: Material S Depth and

thickness of girder at centre 2-10 x 3/4 Length as per rule 34 Distance apart 8 Number and pitch of stays in each 4-7

Working pressure by rules 225 Superheater or Steam chest; how connected to boiler None 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 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



