

REPORT ON MACHINERY.

No. 13234

Port of West HartlepoolReceived at London Office 14th April 1907No. in Survey held at West HartlepoolDate, first Survey 8th Oct, 1906Last Survey 19th April, 1907

Reg. Book.

Bluff on the Ned Niamu Grof Serenyi Bela(Number of Visits 82)Gross 3695.05Tons Net 2391.78When built 1907Master W ReayBuilt at West Hartlepool By whom built W Hays & CoEngines made at West Hartlepool By whom made Central Machine & Works when made 1907Boilers made at West Hartlepool By whom made Central Machine & Works when made 1907Registered Horse Power 292 Owners Atlantic Lengerhajozasi Resenyi Jarsasag Port belonging to SiemeNom. Horse Power as per Section 28 292 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted NoENGINES, &c.—Description of Engines Triple Compound No. of Cylinders Three No. of Cranks ThreeDia. of Cylinders 24" 40" 65" Length of Stroke 42" Revs. per minute 65 Dia. of Screw shaft 1 1/2" as per rule 1 1/2" Material of Steel as fitted 1 1/2" screw shaftIs 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 tightin the propeller boss Yes If the liner is in more than one length are the joints burned No If the liner does not fit tightly at the partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If twoliners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 55"Dia. of Tunnel shaft 11 1/4" as per rule 11 1/4" Dia. of Crank shaft journals 12 1/4" as per rule 12 1/4" Dia. of Crank pin 12 1/4" Size of Crank webs 19 1/2" x 7 1/2" Dia. of thrust shaft undercollars 12 1/4" Dia. of screw 16" x 6" Pitch of Screw 15" x 3" No. of Blades 4 State whether moveable No Total surface 82 sq ftNo. of Feed pumps Two Diameter of ditto 3 1/2" Stroke 26" Can one be overhauled while the other is at work YesNo. of Bilge pumps Two Diameter of ditto 4" Stroke 26" Can one be overhauled while the other is at work YesNo. of Donkey Engines Three Sizes of Pumps 12" x 10" 12" x 6" 6" x 6" No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room Three 3 1/2" In Holds, &c. One 3" 1 1/2" 3"No. of Bilge Injections Two sizes 6 1/2" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"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 YesAre all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks BothAre 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 At orAre 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 YesWhat pipes are carried through the bunkers Yes How are they protected YesAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges YesDates of examination of completion of fitting of Sea Connections 24/3/07 of Stern Tube 9/4/07 Screw shaft and Propeller 9/4/07Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Up StationBOILERS, &c.—(Letter for record S) Manufacturers of Steel J Spencer SonsTotal Heating Surface of Boilers 4524 sq ft Is Forced Draft fitted No No. and Description of Boilers Two single endedWorking Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 5/3/07 No. of Certificate 3097Can each boiler be worked separately Yes Area of fire grate in each boiler 54 sq ft No. and Description of Safety Valves toeach boiler Two Spring Area of each valve 8.29 sq in Pressure to which they are adjusted 185 lb Are they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 17" Mean dia. of boilers 15" x 6" Length 10" x 6" Material of shell plates SteelThickness 1 5/16" Range of tensile strength 27 lb Are the shell plates welded or flanged Both Descrip. of riveting: cir. seams —long. seams double strap 3 double Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 9" Lap of plates or width of butt straps 19 1/4"Per centages of strength of longitudinal joint 85.18% Working pressure of shell by rules 183 lb Size of manhole 16" x 12"Size of compensating ring Hanged No. and Description of Furnaces in each boiler 3 Annular Material Steel Outside diameter 44 1/2"Length of plain part top 1" bottom 1" Thickness of plates 9 1/16" Description of longitudinal joint Welded No. of strengthening rings 11Working pressure of furnace by the rules 183 lb Combustion chamber plates: Material Steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 1 1/16"Pitch of stays to ditto: Sides 8 1/2" x 8 1/2" Back 9" x 8 1/2" Top 9" x 8" If stays are fitted with nuts or riveted heads Both Working pressure by rules 181 lbMaterial of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 9 1/2" x 8" Working pressure by rules 190 lb End plates in steam space:Material Steel Thickness 1 5/16" Pitch of stays 22" x 19 1/4" How are stays secured all nuts Working pressure by rules 180 lb Material of Front plates at bottom SteelDiameter at smallest part 3" x 16" Area supported by each stay 22" x 19 1/4" Working pressure by rules 193 lb Material of Front plates at bottom SteelThickness 1" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 180 lbDiameter of tubes 3 1/2" Pitch of tubes 14 1/2" Material of tube plates Steel Thickness: Front 1" Back 1 1/16" Mean pitch of stays 9"Pitch across wide water spaces 14 1/2" Working pressures by rules 189 lb Girders to Chamber tops: Material Steel Depth andthickness of girder at centre 8 3/4" x 1 1/2" Length as per rule 29 7/8" Distance apart 8" Number and pitch of stays in each Two 9"Working pressure by rules 193 lb Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler workedseparately Yes Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivetholes — 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 —

W1265 F 0180

VERTICAL DONKEY BOILER— Manufacturers of Steel *As per Report Attached hereto*

No. *one* Description *Single Ended two furnaces.*
 Made at *W. Hartlepool* By whom made *Central Marine & Works* When made *1907* Where fixed *Atkirk*
 Working pressure *130 lb* tested by hydraulic pressure to *240 lb* Date of test *7/2/07* No. of Certificate *3098* Fire grate area *54.73 sq* Description of Safety
 Valves *Spring* No. of Safety Valves *Two* Area of each *7.07* Pressure to which they are adjusted *125 lb* Date of adjustment *17/4/07*
 If fitted with easing gear *No* If steam from main boilers can enter the donkey boiler *No* 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
 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:— *The top end bolts. Two bottom end bolts. Two main
 bearing bolts. One set coupling bolts. One set feed pump valve. One set
 Bridge pump valve. One Propeller. Propeller shaft. Main Check Valve. One
 Bolt and nut. 12*

The foregoing is a correct description,

John B. Williams Manufacturer.
 FOR THE CENTRAL MARINE ENGINE WORKS

Dates of Survey while building
 During progress of work in shops— *1906. Oct. 5, 9, 11, 12, 15, 17, 18, 19, 20, 22, 23, Nov. 5, 8, 9, 12, 13, 14, 15, 16, 19, 20, 22, 26, 27, 28, 29, 30, Dec. 3, 4, 5, 6, 7, 10, 12, 14, 17, 19, 21, 1907. Jan. 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17*
 During erection on board vessel— *21, 22, 24, 25, 26, 29, 30, 31, Feb. 1, 14, 5, 6, 7, 13, 14, 18, 21, 22, 25, 27, Mar. 1, 5, 13, 15, 18, 19, 22, 26, Apr. 1, 2, 3, 4, 5, 8, 9, 11, 14, 19*
 Total No. of visits *82* Is the approved plan of main boiler forwarded herewith *no*

Dates of Examination of principal parts—Cylinders *25/2/07* Slides *25/2/07* Covers *25/2/07* Pistons *25/2/07* Rods *14/2/07*
 Connecting rods *14/2/07* Crank shaft *26/4/07* Thrust shaft *26/4/07* Tunnel shafts *5/4/07* Screw shaft *4/2/07* Propeller *22/3/07*
 Stern tube *13/3/07* Steam pipes tested *4/4/07* *8/4/07* Engine and boiler seatings *2/4/07* Engines holding down bolts *5/4/07*
 Completion of pumping arrangements *11/4/07* Boilers fixed *11/4/07* Engines tried under steam *11/4/07*
 Main boiler safety valves adjusted *11/4/07* Thickness of adjusting washers *SS 27/32 SP 27/32 DP 21/32 PS 19/16*
 Material of Crank shaft *Steel* Identification Mark on Do. *4492* Material of Thrust shaft *Steel* Identification Mark on Do. *4492*
 Material of Tunnel shafts *Steel* Identification Marks on Do. *4492* Material of Screw shafts *Steel* Identification Marks on Do. *4492*
 Material of Steam Pipes *Copper* Test pressure *450 lb.*

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

*The Machinery and Boilers of this Steamer
 have been constructed under Special Survey and placed on
 board in accordance with The Society's Rules. They are now in
 my opinion in safe working condition and the case is
 respectfully submitted for the notification + L.M.C. 4. 07
 in the Register Book.*

Note

*This case is similar in all respects to 'Sylvenyi'
 and 'Mazzardozag'; West Hartlepool Reports Nos 13212 & 13217 23/3/07 &
 27/3/07 respectively.*

See Note at end of Donkey Boiler Report.

The amount of Entry Fee.. £ *2* : : When applied for.
 Special £ *34.12* : : *25.4.07*
 Donkey Boiler Fee £ : : When received.
 Travelling Expenses (if any) £ : : *25/4/07*

Committee's Minute

Assigned

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

MACHINERY CERTIFICATE
 WRITTEN.

Lloyd's Register
 Foundation