

REPORT ON MACHINERY.

THUR, 19 AUG 1897

Port of Glasgow

Received at London Office 18

No. in Survey held at Glasgow
Reg. Book.Date, first Survey 5th Feb. 94Last Survey 2nd August 94(Number of Visits 32)on the Ten & a half Screw Steamship "Chebucto."Gross 548
Net 184Master J. Geddie Built at GlasgowBy whom built John Shearer & SonWhen built 1894Engines made at GlasgowBy whom made McKie & Baxterwhen made 1894Boilers made at GlasgowBy whom made A. Nicholson & Co.when made 1894

Registered Horse Power

Owners J. Shearer & SonPort belonging to GlasgowNom. Horse Power as per Section 28 74Is Electric Light fitted YesENGINES, &c.—Description of Engines CompoundNo. of Cylinders FourNo. of Cranks FourDiameter of Cylinders 12" - 24" Length of Stroke 18" Revolutions per minute 160 Diameter of Screw shaft as per rule 4.85"Diameter of Tunnel shaft as per rule 4.6" Diameter of Crank shaft journals 5" Diameter of Crank pin 5" Size of Crank webs 32" x 6 1/2"Diameter of screws 6 3/4" Pitch of screw 8 3/4" No. of blades 4 State whether moveable Yes Total surface 15.8"No. of Feed pumps 1 Duplex Diameter of ditto 5 1/2" Stroke 6" Can one be overhauled while the other is at work ✓No. of Bilge pumps 1 Duplex Diameter of ditto 4 1/2" Stroke 4" Can one be overhauled while the other is at work ✓No. of Donkey Engines 4 Sizes of Pumps (3 x 2 x 3) (3 x 2 x 3) (3 x 2 x 3) (3 x 2 x 3) No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room Two: 2" dia. In Hold, &c. one: 2" dia.No. of bilge injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump Centrifugal pump Is a separate donkey suction fitted in Engine room & size Yes: 2" dia.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 ✓Are 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 AwayAre 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 None How are they protected ✓Are 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 YesWhen were stern tube, propeller, screw shaft, and all connections examined in dry dock See vessel Is the screw shaft tunnel watertight NoneIs it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—

(Letter for record R)Total Heating Surface of Boilers 1669 sq. ft.Is forced draft fitted NoNo. and Description of Boilers Two: bygone "navy" type Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbsDate of test 4/6/94 Can each boiler be worked separately Yes Area of fire grate in each boiler 27 sq. ft. No. and Description of safety valves toeach boiler 2: Direct Spring Area of each valve 4.9 sq. in. Pressure to which they are adjusted 122 lbs Are they fittedwith easing gear Yes Smallest distance between boilers or uptakes and bunkers or woodwork About 6 ft. Mean diameter of boilers 4' 6"Length 18' 0" Material of shell plates Steel Thickness 3/32" Description of riveting: circum. seams Lap Single long. seams OTB Shaps DoubleDiameter of rivet holes in long. seams 13/16" Pitch of rivets 3 1/4" Lap of plates or width of butt straps 4 1/2"Per centages of strength of longitudinal joint rivets 80 Working pressure of shell by rules 125 lbs Size of manhole in shell 16" x 12"Size of compensating ring 6" x 19 1/2" No. and Description of Furnaces in each boiler 2: Corrugated Material Steel Outside diameter 36"Length of plain part top 34' 6" bottom 34' 6" Thickness of plates crown 3/8" bottom 3/8" Description of longitudinal joint Welded No. of strengthening rings -Working pressure of furnace by the rules 140 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/32" Back ✓ Top 3/32" Bottom 3/32"Pitch of stays to ditto: Sides 8 1/2" x 8" Back ✓ Top 8 1/2" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 127 lbsMaterial of stays Iron Diameter at smallest part 1 3/8" Area supported by each stay 66 sq. in. Working pressure by rules 131 lbs End plates in steam space:Material Steel Thickness 3/4" Pitch of stays 15" x 13" How are stays secured Double nuts & washers Working pressure by rules 120 lbs Material of stays SteelDiameter at smallest part 2" Area supported by each stay 195 sq. in. Working pressure by rules 145 lbs Material of Front plates at bottom SteelThickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays ✓ Working pressure of plate by rules ✓Diameter of tubes 4" Pitch of tubes 5' 8" x 5' 8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 12' 8"Pitch across wide water spaces ✓ Working pressures by rules 122 lbs Girders to Chamber tops: Material Steel Depth andthickness of girder at centre 4" x 1 1/4" Length as per rule 28" Distance apart 8" Number and pitch of Stays in each 2: 8 1/4"Working pressure by rules 134 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler workedseparately ✓ 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

15427 yrs.

DONKEY BOILER— Description *None fitted.*

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____

Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Lap of plating _____ Per centage of strength of joint _____ Rivets _____ 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 _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *Two propeller blades, 2 connecting Rods, Boiler tubes, 6 Condenser Tubes, and List of Spare Gear required by the Rules.*

The foregoing is a correct description,
Manufacturer. _____

Merle Austin

Dates of Survey while building { During progress of work in shops - 1894 Feb 5, 12, 15, 22, 24, 26. March 2, 5, 16, 17, 22, 24, 27, 30 April 15, 20, 21, 26, May 6, 14, 22, 24, June 4, 8, 24, 25, July 6, 8, 14, Aug 5, 9, 12
During erection on board vessel -
Total No. of visits 32

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

The Engines and Boilers of this vessel have been built under special survey and the materials and workmanship are good. When completed they were tried under full steam and worked satisfactorily.

*The machinery is now in good and efficient condition and eligible in my opinion to have the record of **L.M.C. 8,94** marked in the Society's Register Book.*

It is submitted that
this vessel is eligible for
THE RECORD. *+ L.M.C. 8,94*

LL
19/8/97

Steel double screw. (Screws arranged fore & aft.)
to be noted in the Reg. Book.

Correct
Wm. Austin

LL
2/11/97

The amount of Entry Fee. £ 1 : " :
Special " " £ 11 : 2 :
Donkey Boiler Fee " " £ " : " :
Travelling Expenses (if any) £ " : " :
When applied for, 14/8/97
When received, 24/8/97

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

Committee's Minute

FRI 20 AUG 1897

Assigned

+ L.M.C. 8,94