

# REPORT ON MACHINERY.

THUR, 19 AUG 1897

Port of Glasgow

Received at London Office

No. in Survey held at Glasgow  
Reg. Book.

Date, first Survey 30 Feb 94

Last Survey 2<sup>nd</sup> August 1894

(Number of Visits 32)

on the Fore and Aft Screw Steamship "Chebucto"

Tons { Gross 548  
Net 184

Master J. Geddie Built at Glasgow By whom built John Shearer & Son

When built 1894

Engines made at Glasgow By whom made McKie & Baxter

when made 1894

Boilers made at Glasgow By whom made A. Nicholson & Co.

when made 1894

Registered Horse Power Owners J. Shearer & Son

Port belonging to Glasgow

Nom. Horse Power as per Section 28 74

Is Electric Light fitted Yes

## ENGINES, &c.—Description of Engines Compound

No. of Cylinders Four No. of Cranks Four

Diameter 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 3 1/2" x 6 1/2"

Diameter of screws 6 1/2" Pitch of screw 8.3" 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 (2 x 2 x 3) (2 x 2 x 3) also fixed No. and size of Suctions connected to both Bilge and Donkey pumps In 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 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 Both

Are 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 Awash

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 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 Yes

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock See vessel Is the screw shaft tunnel watertight None

Is 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 No

No. and Description of Boilers Two: bygone "navy" type Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs

Date 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 to each boiler 2: Direct Spring Area of each valve 4.9 sq. in. Pressure to which they are adjusted 122 lbs Are they fitted with 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 1/32" Description of riveting: circum. seams Lap Single long. seams OTB Shaps Double

Diameter 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"

Percentages of strength of longitudinal joint rivets 80 Working pressure of shell by rules 125 lbs Size of manhole in shell 16" x 12" plate 75

Size of compensating ring 6" x 19/32" No. and Description of Furnaces in each boiler 2: Corrugated Material Steel Outside diameter 36"

Length of plain part top 34.6" Thickness of plates bottom 3" 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 32 Bottom 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 lbs

Material 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 Steel

Diameter at smallest part 2" Area supported by each stay 195 sq. in. Working pressure by rules 145 lbs Material of Front plates at bottom Steel

Thickness 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 1/2" x 5 1/2" 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 and thickness 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 137 lbs 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

Report also sent on the Hull of the Ship. Do not state whether, and when, one will be sent.



