

BOX CASE.

No. 15654

REPORT ON MACHINERY.

MON 29 NOV 1897

Port of Glasgow
 No. in Survey held at Glasgow Date, first Survey 25th January Last Survey 22nd November 1894
 reg. Book. "S. S. Spracombe" (Number of Visits 30)
 on the "S. S. Spracombe"
 Master Glasgow Built at Glasgow By whom built Maekie & Thomson Tons { Gross 165 Net 51
 Engines made at Glasgow By whom made Muir & Houston Lim^d when made 1897
 Boiler made at Glasgow By whom made Muir & Houston Lim^d when made 1897
 Registered Horse Power 45 Owners Hagsump Daugherty & Co. Port belonging to Trinity
 Nom. Horse Power as per Section 28 35 Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks Three
 Diameter of Cylinders 10" - 16" - 24" Length of Stroke 20" Revolutions per minute 100 Diameter of Screw shaft as per rule 5 1/2"
 Diameter of Ante shaft as per rule 4 1/2" Diameter of Crank shaft journals 5 1/2" Diameter of Crank pin 5 1/2" Size of Crank webs 10" x 3 1/2"
 Diameter of screw 8' - 0" Pitch of screw 10' - 0" No. of blades Two State whether moveable Old Total surface 24 sq ft.
 No. of Feed pumps One Diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work ✓
 No. of Bilge pumps One Diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work ✓
 No. of Donkey Engines One Sizes of Pumps 5" x 2 1/2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two, 2" x 2" & 2" In Holds, &c. One - 2"

No. of bilge injections One sizes 2 1/2" Connected to condenser, or to circulating pump Pumps a separate donkey suction fitted in Engine room & size 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 None fitted
 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 Above
 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 suction How are they protected Wood casing
 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 Before launching the screw shaft tunnel watertight No tunnel
 Is it fitted with a watertight door ✓ worked from ✓

OILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 536 sq ft. Is forced draft fitted No
 No. and Description of Boilers One - cylind^r. Single Ended Working Pressure 180 lbs Tested by hydraulic pressure to 300 lbs
 Date of test 22nd 10-94 Can each boiler be worked separately ✓ Area of fire grate in each boiler 28 sq ft No. and Description of safety valves to
 each boiler Two - Rivet Spring Area of each valve 2 1/4 sq ft pressure to which they are adjusted 185 lbs Are they fitted
 with easing gear Yes Smallest distance between boilers on deck and bunkers on woodwork 18" Mean diameter of boilers 9' - 6"
 Length 8' - 0" Material of shell plates Steel Thickness 29/32 Description of riveting: circum. seams Lap Rivet long. seams Butt Rivet
 Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7/8" Lap of plates or width of butt straps 17"
 Per centages of strength of longitudinal joint rivets 86.7 plate 85.0 Working pressure of shell by rules 186 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring Mc Neil's No. and Description of Furnaces in each boiler Two - Plain Material Steel Outside diameter 36"
 Length of plain part top 4' - 3" bottom 6' - 6" Thickness of plates crown 7/8" bottom 7/8" Description of longitudinal joint Weld No. of strengthening-rings ✓
 Working pressure of furnace by the rules 183 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 13/16"
 Pitch of stays to ditto: Sides 1 1/4" x 1 1/4" Back 1 1/4" x 1 1/4" Top 1 1/4" x 6 1/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 182 lbs
 Material of stays Steel Diameter at smallest part 1 1/8" x 1 1/2" Area supported by each stay 60 sq" Working pressure by rules 192 lbs End plates in steam space:
 Material Steel Thickness 3/8" Pitch of stays 13 1/2" x 13 1/2" How are stays secured Nuts & Washers Working pressure by rules 185 lbs Material of stay Steel
 Diameter at smallest part 2 1/8" Area supported by one stay 182 sq" Working pressure by rules 96 lbs Material of Front plates at bottom Steel
 Thickness 4/16" Material of Lower back plate Steel Thickness 4/16" Greatest pitch of stays 11 1/2" Working pressure of plate by rules 254 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 4/16" Back 4/16" Mean pitch of stays 9 1/4" x 9"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 184 lbs Girders to Chamber tops: Material Iron Depth and
 thickness of girder at centre 6 1/4" x (7/8" x 2) Length as per rule 26" Distance apart 6 1/4" Number and pitch of Stays in each Two - 7 1/4"
 Working pressure by rules 187 lbs Superheater or Steam chest; how connected to boiler ✓ 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

W1052-0022

DONKEY BOILER— Description *None*

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 connecting rod top end, two bottom end bolts and nuts: set coupling bolts: set main bearing bolts: set air circulating, feed & pump valves, iron bolts etc.*

The foregoing is a correct description,
Muir Thomson & Co Manufacturer.

Dates { During progress of work in shops - - *1894 Jan 25, Feb 10, 25, March 6, 10, 30, April 6, 23, 24, 28, May 19, June 9, 30, July 5*
 of Survey { During erection on board vessel - - *Aug 14, 26, Sept 6, 8, 14, Oct 11, 12, 14, 22, 28, 30, Nov 8, 13, 16, 20, 22,*
 while building { Total No. of visits *30,-*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been constructed under Special Survey, and is of good material and workmanship; it has been seawely fitted on board, and satisfactorily under steam, in my opinion, it is eligible to have record + L.M.C. 11-9, in the Register Book.*

Two Forging Reports are appended.

It is submitted that this vessel is eligible for THE RECORD.
+ L.M.C. 11, 97
RS
29/11/97

Certificate (if required) to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee.. £ *1* : " : : When applied for, *26/11 04/05 1.12.97*
 Special £ *8* : " : :
 Donkey Boiler Fee £ " : " : : When received, *30-11-97*
 Travelling Expenses (if any) £ " : " : :

R. P. Bennett
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute
 Assigned
 TUES. 30 NOV 1897
+ L.M.C. 11, 97

