

# REPORT ON BOILERS.

No. 30159.

Date of writing Report May 13<sup>th</sup> 1911 When handed in at Local Office 19/5/1911 Port of Glasgow Received at London Office WED. 24 MAY 1911

No. in Survey held at Glasgow Date, First Survey 25<sup>th</sup> April 1911 Last Survey May 12<sup>th</sup> 1911

Reg. Book. on the TWIN S/S "ELEPHANTA" (Number of Visits 97) Tons { Gross 5292 Net 2698

Master R. H. Coope Built at Whiteinch By whom built Barclay Curle & Co. Ltd. When built 1911

Engines made at Glasgow By whom made Barclay Curle & Co. Ltd. when made 1911

Boilers made at Glasgow By whom made Barclay Curle & Co. Ltd. when made 1911

Registered Horse Power \_\_\_\_\_ (Owners British India Steam Navigation Co. Ltd. Port belonging to Glasgow)

## MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~—Manufacturers of Steel Steel Company of Scotland & D. Colville & Co.

(Letter for record A) Total Heating Surface of Boilers 5783 sq ft Is forced draft fitted yes No. and Description of Boilers two single ended Working Pressure 215 lbs Tested by hydraulic pressure to 430 lbs Date of test 27-2-11

No. of Certificate 10824 Can each boiler be worked separately yes Area of fire grate in each boiler 71.5 sq ft No. and Description of safety valves to each boiler double spring loaded Area of each valve 9.62 sq in Pressure to which they are adjusted 220 lbs.

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler \_\_\_\_\_

Smallest distance between boilers ~~plates~~ and bunkers ~~woodwork~~ 18" Mean dia. of boilers 16'-9" Length 12'-0"

Material of shell plates steel Thickness 10/8" Range of tensile strength 30/34 tons Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams T.R. long. seams T.R. O.B.S. Diameter of rivet holes in long. seams 15/8" Pitch of rivets 10 3/32"

Gap of plates or width of butt straps 23" Per centages of strength of longitudinal joint rivets 94.4 Working pressure of shell by rules 250 Size of manhole in shell 17" x 13" Size of compensating ring 10" x 15/8" No. and Description of Furnaces in each boiler 4 Horizontal Suspension Material steel Outside diameter 3'-7 1/4" Length of plain part top 15" Thickness of plates bottom 5/8"

Description of longitudinal joint weld No. of strengthening rings ✓ Working pressure of furnace by the rules 232 Combustion chamber plates: Material steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 15/16" Pitch of stays to ditto: Sides 7 3/4" x 8 1/4" Back 7 3/4" x 9"

Top 8 1/4" x 8 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 222 Material of stays steel area at smallest part 1.73 sq in Area supported by each stay 63.93 sq in Working pressure by rules 216 End plates in steam space: Material steel Thickness 1 1/4"

Pitch of stays 20" x 15 1/4" How are stays secured D. nuts Working pressure by rules 221 Material of stays steel area at smallest part 7.24 sq in

Area supported by each stay 305 sq in Working pressure by rules 246 Material of Front plates at bottom steel Thickness 27/32" Material of Lower back plate steel Thickness 29/32" Greatest pitch of stays 14 1/4" x 7 3/4" Working pressure of plate by rules 216 Diameter of tubes 2 1/2"

Pitch of tubes 3 3/4" x 3 5/8" Material of tube plates steel Thickness: Front 31/32" Back 13/16" Mean pitch of stays abt. 7 3/8" Pitch across wide water spaces 13 1/2" Working pressures by rules 224 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 10" x 20 3/4" Length as per rule 2'-10 3/32" Distance apart 8 1/8" Number and pitch of Stays in each 3 @ 8 1/4"

Working pressure by rules 224 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 ✓

The foregoing is a correct description,

James Hildchrist Manufacturer.

Dates of Survey { During progress of work in shops - - } See machinery report Is the approved plan of boiler forwarded herewith Forwarded with Sh. Rep 30018

{ While building { During erection on board vessel - - - } Total No. of visits \_\_\_\_\_

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

See Report on Machinery

Survey Fee ... .. £ : : } When applied for. .... 19

Travelling Expenses (if any) £ : : } When received. .... 19

Glasgow 23 MAY 1911

H.C. Forster  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping

Committee's Minute

Assigned See accompanying machinery report.

Assigned See accompanying mach.



W 497-0344