

# REPORT ON BOILERS.

No. 35880  
SAT. - 8 APR. 1916

Received at London Office

Port of Glasgow  
 Survey held at Glasgow Date, First Survey 6/2/14 Last Survey 23/3/16  
 on the H.M.S. "Avenger"  
 Built at Glasgow By whom built Fairfield S.E.C. & L<sup>d</sup> (499) When built  
 made at Glasgow By whom made Fairfield S.E.C. & L<sup>d</sup> (499) When made  
 made at Renfrew By whom made Balcock, Wilson & L<sup>d</sup> (229) When made 1915  
 Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

**TUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY.** - Manufacturers of Steel Balvill

Total Heating Surface of Boilers 35080 # Is forced draft fitted yes No. and Description of \_\_\_\_\_  
 Working Pressure 230 Tested by hydraulic pressure to 460 Date of test 3.5.15  
 Area of fire grate in each boiler 108.2 # No. and Description of \_\_\_\_\_  
 Area of each valve 9.62 # Pressure to which they are adjusted 235 #  
 Thickness of shell plates 9/16 + 1/16 Range of tensile strength 26-30 Are the shell plates welded or flanged -  
 Diameter of rivet holes in long. seams 27/32 Pitch of rivets 3 13/32  
 Per centages of strength of longitudinal joint \_\_\_\_\_ Working pressure of shell by \_\_\_\_\_  
 Size of manhole in shell 15 + 11 # Size of compensating ring M. Smith No. and Description of Furnaces in each \_\_\_\_\_  
 Material \_\_\_\_\_ Outside diameter \_\_\_\_\_ Length of plain part \_\_\_\_\_ Thickness of plates \_\_\_\_\_  
 No. of strengthening rings \_\_\_\_\_ Working pressure of furnace by the rules \_\_\_\_\_ Combustion chamber \_\_\_\_\_  
 Material \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_ Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_  
 Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_ Diameter at \_\_\_\_\_  
 End plates in steam space: Material S Thickness 13/16  
 Working pressure by rules 241 Material of stays \_\_\_\_\_ Diameter at smallest part \_\_\_\_\_  
 Material of Front plates at bottom \_\_\_\_\_ Thickness \_\_\_\_\_ Material of \_\_\_\_\_  
 Working pressure of plate by rules \_\_\_\_\_ Diameter of tubes 1 1/8 + 3 1/8  
 Material of \_\_\_\_\_ Thickness: Front 13/32 Back 13/32 Mean pitch of stays \_\_\_\_\_ Pitch across wide \_\_\_\_\_  
 Girders to Chamber tops: Material \_\_\_\_\_ Depth and thickness of \_\_\_\_\_  
 Number and pitch of Stays in each \_\_\_\_\_  
 Can the superheater be shut off and the boiler worked \_\_\_\_\_  
 Diameter 8 1/8 + 5 1/2 Length 6.10 + 4.6 Thickness of shell plates 13/16 Material S Description of longitudinal joint weld Diam. of rivet \_\_\_\_\_  
 Working pressure of shell by rules 250 Diameter of flue 1 1/2 Material of flue plates S Thickness \_\_\_\_\_  
 Area of safety valves to superheater 3.14 # Are they fitted with easing gear yes

The foregoing is a correct description,  
Balvill & Wilson Limited Manufacturer.

Is the approved plan of boiler forwarded herewith yes  
 Total No. of visits \_\_\_\_\_

**REMARKS** (State quality of workmanship, opinions as to class, &c.)  
These boilers have been built under special survey in accordance with the approved rules & the workmanship & material are of good quality. Report accompanies that of the machinery.

Expenses (if any) £ 39. 4. 1 When applied for, 19/2/16  
 £ \_\_\_\_\_ When received, 23/3/16

W. Gordon Maclean  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Minute **GLASGOW** - 8 APR. 1916

See accompanying machinery report