J. J. "Auxiliary"

Rpt. 5.

REPORT ON BOILERS.

No. 25146

TUES. 11 JUN 1907

Port of Glasgow. Received at London Office 19

No. in Reg. Book. Survey held at Annan. Date, first Survey 15th March Last Survey 12th April 1907 (Number of Visits)

on the Donkey boiler for Messrs D. Rowan & Co's No. 471. Tons { Gross / Net

Master Built at By whom built When built

Engines made at Glasgow By whom made David Rowan & Co. (No. 471) when made 1907

Boilers made at do By whom made do when made

Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

(Letter for record) **Total Heating Surface of Boilers** Is forced draft fitted **No. and Description of Boilers** **Working Pressure** Tested by hydraulic pressure to Date of test

No. of Certificate Can each boiler be worked separately **Area of fire grate in each boiler** No. and Description of safety valves to each boiler Area of each valve Pressure to which they are adjusted

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

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length

Material of shell plates Thickness Range of tensile strength Are the shell plates welded or flanged

Descrip. of riveting: cir. seams long. seams Diameter of rivet holes in long. seams Pitch of rivets

Lap of plates or width of butt straps Per centages of strength of longitudinal joint { rivets / plate Working pressure of shell by rules Size of manhole in shell Size of compensating ring **No. and Description of Furnaces in each boiler** Material Outside diameter Length of plain part { top / bottom Thickness of plates { crown / bottom

Description of longitudinal joint No. of strengthening rings Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space: Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and thickness of girder at centre Length as per rule Distance apart Number and pitch of Stays in each Working pressure by rules 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

VERTICAL DONKEY BOILER—

No. 10474 Description Cross tube Manufacturers of steel Wm Beardmore & Co

Made at Annan By whom made Cochran & Co. When made 1907 Where fixed Stokehold

Working pressure 80 tested by hydraulic pressure to 160 No. of Certificate 8888 Fire grate area 6 sq ft Description of safety valves Spring loaded

No. of safety valves 2 Area of each 3·14 sq in Pressure to which they are adjusted 85 If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No. Dia. of donkey boiler 3' 6" Length 7' 6" Material of shell plates steel Thickness 3/8" Range of tensile strength 27-32 Descrip. of riveting long. seams double Dia. of rivet holes 23/32" Whether punched or drilled drilled Pitch of rivets 2.146

Lap of plating 3 5/8" Per centage of strength of joint { Rivets 84 / Plates 66.6 Working pressure of shell by rules 123 lbs Thickness of shell crown plates 1/2"

Radius of do. 3' 6" No. of Stays to do. none Dia. of stays ✓ Diameter of furnace Top 2' 9" Bottom 3' 0½" Length of furnace 3' 3½"

Thickness of furnace plates 1/2" Description of joint riveted Working pressure of furnace by rules 159 lbs Thickness of furnace crown plates 1/2" Stayed by ✓ Diameter of uptake 10" o.d. Thickness of uptake plates 3/8" Thickness of water tubes 7/16"

The foregoing is a correct description, Drawing No. 6266.

For COCHRAN & CO. ANNAN, LIMITED

W. Bell Manufacturer.

Dates of Survey while building { During progress of work in shops - - / During erection on board vessel - - - } 1907 Mar. 15. 22. 28. Apr 11. 12

Total No. of visits 5

Is the approved plan of main boiler forwarded herewith —

" " " donkey " " " —

W13095-0296

GENERAL REMARKS (*State quality of workmanship, opinions as to class, &c.* This boiler has been made under Survey, the materials & workmanship are good

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...	£	:	:	When applied for, Monthly
Special	£	:	:	19
Donkey Boiler Fee ...	£	2 :	2 :	When received,
Travelling Expenses (if any))	£	:	:	19

James Hollison
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute Glasgow 22 APR 1907

Assigned Deferred for completion

Retain.