

REPORT ON MACHINERY.

No. 4481

Received at London Office Thursday, 3rd June, 1886

No. in Survey held at
Reg. Book.

Date, first Survey 10th Feb^y

Last Survey 1st May 1886

(Number of Visits 2)

on the

Sailing Ship "Barnockburn"

Tons 2000

Master

Built at

By whom built

Barclay, Curle & Co. (Lime)

When built 1886

Engines made at

By whom made

when made

Boilers made at

By whom made

Barclay, Curle & Co. (Lime)

when made

1886

Registered Horse Power

Owners

Shankland

Port belonging to

Greenock

ENGINES, &c.—

Description of Engines

Diameter of Cylinders Length of Stroke No. of Rev. per minute Point of Cut off, High Pressure Low Pressure

Diameter of Screw shaft Diam. of Tunnel shaft Diam. of Crank shaft journals Diam. of Crank pin size of Crank webs

Diameter of screw Pitch of screw No. of blades state whether moveable total surface

No. of Feed pumps diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps diameter of ditto Stroke Can one be overhauled while the other is at work

Where do they pump from

No. of Donkey Engines

Size of Pumps

Where do they pump from

Are all the bilge suction pipes fitted with roses

Are the roses always accessible

Are the sluices on Engine room bulkheads always accessible

No. of bilge injections and sizes

Are they connected to condenser, or to circulating pump

How are the pumps worked

Are all connections with the sea direct on the skin of the ship

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the discharge pipes above or below the deep water line

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the blow off cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers

How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

Is the screw shaft tunnel watertight

and fitted with a sluice door

worked from

BOILERS, &c.—

Number of Boilers

Description

Whether Steel or Iron

Working Pressure

Tested by hydraulic pressure to

Date of test

Description of superheating apparatus or steam chest

Can each boiler be worked separately

Can the superheater be shut off and the boiler worked separately

No. of square feet of fire grate surface in each boiler

Description of safety valves

No. to each boiler

Area of each valve

Are they fitted with easing gear

No. of safety valves to superheater

area of each valve

Are they fitted with easing gear

Smallest distance between boilers and bunkers or woodwork

Diameter of boilers

Length of boilers

description of riveting of shell long. seams

circum. seams

Thickness of shell plates

Diameter of rivet holes

whether punched or drilled

pitch of rivets

Lap of plating

Per centage of strength of longitudinal joint

working pressure of shell by rules

size of manholes in shell

Size of compensating rings

No. of Furnaces in each boiler

Outside diameter

length, top

bottom

thickness of plates

description of joint

if rings are fitted

Greatest length between rings

working pressure of furnace by the rules

combustion chamber plating, thickness, sides

back top

Pitch of stays to ditto, sides

back

top

If stays are fitted with nuts or riveted heads

working pressure of plating by

rules

Diameter of stays at smallest part

working pressure of ditto by rules

end plates in steam space, thickness

Pitch of stays to ditto

how stays are secured

working pressure by rules

diameter of stays at

smallest part

working pressure by rules

Front plates at bottom, thickness

Back plates, thickness

Greatest pitch of stays

working pressure by rules

Diameter of tubes

pitch of tubes

thickness of tube

plates, front

back

how stayed

pitch of stays

width of water spaces

Diameter of Superheater or Steam chest

length

thickness of plates

description of longitudinal joint

diam. of rivet holes

Pitch of rivets

working pressure of shell by rules

diameter of flue

thickness of plates

If stiffened with rings

Distance between rings

working pressure by rules

end plates of superheater, or steam chest; thickness

how stayed

Superheater or steam chest; how connected to boiler

7481 gls

DONKEY BOILER— Description *Vertical*
Made at *Glasgow* by whom made *Barclay Curle & Co. Limited* when made *1886* where fixed *On deck*
Working pressure *60 lbs* tested by hydraulic pressure to *120 lbs* No. of Certificate *1635* fire grate area *9 ft²* description of safety
valves *Direct Spring* No. of safety valves *One* area of each *4"* if fitted with easing gear *—* if steam from main boilers can
enter the donkey boiler *—* diameter of donkey boiler *4' 0"* ^{length} *8' 9"* description of riveting *Single riveted lap*
Thickness of shell plates *1/16"* diameter of rivet holes *3/4"* whether punched or drilled *Drilled* pitch of rivets *1 3/4"* lap of plating
per centage of strength of joint thickness of crown plates *1/16"* stayed by *three stays 1 1/2" dia + uptake*
Diameter of furnace, top *3 ft* bottom *3' 6"* length of furnace *4' 6"* thickness of plates *1/16"* description of joint *Lap*
Thickness of furnace crown plates *1/16"* stayed by *Uptake 1 1/2" dia + three stays* working pressure of shell by rules *93 lbs*
Working pressure of furnace by rules *90 lbs* diameter of uptake *1 1/2"* thickness of plates *1/16" iron* thickness of water tubes *—*

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Safety Valve has been tested & set under steam to 60 lbs working pressure and the Boiler is now in good order and safe working condition

This appears to be satisfactory
1/11/86

The amount of Entry Fee *£* : : received by me, *(Signature)*

Special .. *£* : :

Donkey Boiler Fee *£ 2 : 2*

Certificate (if required) .. *£* : :

To be sent as per margin.

(Travelling Expenses, if any, £ ..)

Committee's Minute

Friday, 4th June, 1886.

James Morrison
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Glyde District