

# REPORT ON MACHINERY.

No. 22.

(Received at London Office 5th MAR 83)

No. in Survey held at Dundee

Date, first Survey 4/9/82

Last Survey 29th Jan 1883

Re. ok.

(Number of Visits)

2012-74

on the S. "Dundee"

Tons 2062.92

Naughton

Built at

Dundee

When built

1882

By whom made

when made

By whom made

when made

W.B. Thompson 1883

red Horse Power

Owners

B. Barrie

Port belonging to

Dundee

NES, &c.—

ion of Engines

r of Cylinders

Length of Stroke

No. of Rev. per minute

Point of Cut off, High Pressure

Low Pressure

r of Screw shaft

Diameter of Tunnel shaft

Diameter of Crank shaft journals

Diameter of Crank pin

size of Crank webs

r of screw

Pitch of screw

No. of blades

state whether moveable

total surface

Feed pumps

diameter of ditto

Stroke

Can one be overhauled while the other is at work

Bilge pumps

diameter of ditto

Stroke

Can one be overhauled while the other is at work

to they pump from

Donkey Engines

Size of Pumps

Where do they pump from

the bilge suction pipes fitted with roses

Are the roses always accessible

Are the sluices on Engine room bulkheads always accessible

bilge injections

and sizes

Are they connected to condenser, or to circulating pump

the pumps worked

connections with the sea direct on the skin of the ship

Are they Valves or Cocks

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

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

pipes are carried through the bunkers

How are they protected

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

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

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

screw shaft tunnel watertight

and fitted with a sluice door

worked from

RS, &c.—

of Boilers

Description

Pressure

Tested by hydraulic pressure to

Date of test

n of superheating apparatus or steam chest

boiler be worked separately

Can the superheater be shut off and the boiler worked separately

quare feet of fire grate surface in each boiler

Description of safety valves

ch boiler

area of each valve

Are they fitted with easing gear

fety valves to superheater

area of each valve

are they fitted with easing gear

istance between boilers and bunkers or woodwork

of boilers

Length of boilers

description of riveting of shell long. seams

circum. seams

of shell plates

diameter of rivet holes

whether punched or drilled

pitch of rivets

lating

per centage of strength of longitudinal joint

working pressure of shell by rules

anholes in shell

size of compensating rings

urnaces in each boiler

outside diameter

length, top

bottom

of plates

description of joint

if rings are fitted

greatest length between rings

pressure of furnace by the rules

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 \_\_\_\_\_ diameter 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 \_\_\_\_\_ heater, or steam chest; thickness \_\_\_\_\_ How stayed \_\_\_\_\_  
 Superheater or \_\_\_\_\_ chest; how connected to boiler \_\_\_\_\_

**DONKEY BOILER**— Description one Round Vertical  
 Made at Bundee By whom made W B Thompson when made 1883  
 Where used in Dock working pressure 55 lb Tested by hydraulic pressure to 110 lb No. of Certificate 211  
 Fire grate area 10 sq ft Description of safety valves direct S.Z. No. of safety valves one area of each 9.6  
 If fitted with easing gear yes If steam from main boilers can enter the donkey boiler —  
 Diameter of donkey boiler 6 ft 6 in length 10-0 description of riveting Lap D.R.  
 thickness of shell plates 7/16 diameter of rivet holes 7/8 whether punched or drilled punched  
 pitch of rivets 3 7/16 lap of plating 4 3/8 + 2 5/8 per centage of strength of joint 75-80 %  
 thickness of crown plates 3 1/2 stayed by dished  
 Diameter of furnace, top 4-4 bottom 4-11 length of furnace 4-0  
 thickness of plates 7/16 description of joint Lap D.R.  
 thickness of furnace crown plates 7/16 stayed by dished  
 Working pressure of shell by rules 75 lbs working pressure of furnace by rules 77 lbs  
 diameter of uptake 1 1/2 thickness of plates 1/2 thickness of water tubes 3/8

The foregoing is a correct description,

W B Thompson Manufacturer.  
A Smith

**General Remarks** (State quality of workmanship, opinions as to class, &c. This boiler has been fitted  
in accordance with the requirements of the Rules, and  
its plans submitted for the Committee's approval dated 5/9/82  
The material & workmanship are of the best description  
The boiler has been tested by steam and the safety valve  
set to a working pressure of 55 lbs per square inch  
and in my opinion eligible to be granted Certificate of Suit

The amount of Entry Fee £ : : received by me, }  
 Special £ 2 : 2 : 0 }  
 Certificate (if required) .. £ : : 26<sup>th</sup> Feb 1883.  
 To be sent as per margin.  
 (Travelling Expenses, if any, £ )

Committee's Minute

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John Sturrock 2019  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping  
Bundee District