

REPORT ON MACHINERY.

1875

iciencies? *yes*

Survey held at

Newcastle

Date, first Survey *13th March*

Received at London Office

Last Survey *1st Octr* 1885

on the

Steamer Buccancer

(Number of Visits *13*)

Tons *785*
460

of Iron or Steel give Scan

Thompson

Built at *Newcastle*

By whom built

Ripham Richardson & Co

When built *1885*

made at *Newcastle*

By whom made

Ripham Richardson & Co

when made

1885

made at *do*

By whom made

do

do

when made

1885

Horse Power *180*

Owners *Charles J. D. Christie*

Port belonging to *London*

ES, &c.—

of Engines

Nicol acting compound Surface Condensing

of Cylinders

30 & 61

Length of Stroke

69"

No. of Rev. per minute

70

Point of Cut off, High Pressure *60%* Low Pressure *50%*

of Screw shaft

11"

Diam. of Tunnel shaft

10 1/2"

Diam. of Crank shaft journals

11"

Diam. of Crank pin

11"

size of Crank webs *8 1/2" x 18"*

of screw

11.6"

Pitch of screw

20.0"

No. of blades

4

state whether moveable

no

total surface *44 sq*

feed pumps

2

diameter of ditto

3 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

bilge pumps

2

diameter of ditto

3 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

they pump from

Engine Space, holds hot well, after well to Sea

monkey Engines

1

Size of Pumps

4" x 8"

Where do they pump from *Engine Space, holds hot well, after well to Sea*

bilge suction pipes fitted with roses

yes

Are the roses always accessible

yes

Are the sluices on Engine room bulkheads always accessible

yes

yes

injections

one

and sizes

3"

Are they connected to condenser, or to circulating pump

circulating pump

yes

the pumps worked

Levers over Condenser

connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

both

yes

placed sufficiently high on the ship's side to be seen without lifting the stokehold plates

yes

Are the discharge pipes above or below the deep water line

at line

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

yes

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

yes

are carried through the bunkers

none

How are they protected

—

yes

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

yes

yes

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

yes

yes

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

new

yes

shaft tunnel watertight

yes

and fitted with a sluice door

yes

worked from

upper platform

yes

, &c.—

One

Description

Buttle ended

Whether Steel or Iron

Steel

yes

pressure

100 lbs

Tested by hydraulic pressure to

200 lbs

Date of test

9.5.85

by

Mr J. C. 1845

yes

of superheating apparatus or steam chest

no dome

yes

Can the superheater be shut off and the boiler worked separately

—

Can the superheater be shut off and the boiler worked separately

—

yes

feet of fire grate surface in each boiler

103 sq

Description of safety valves

Spring

No. to each boiler

2

yes

valve

17.75

Are they fitted with easing gear

yes

No. of safety valves to superheater

—

area of each valve

—

Smallest distance between boilers and bunkers or woodwork

6"

Diameter of boilers

14.0"

yes

description of riveting of shell long. seams

Butt. Riveted

circum. seams

Lap double

Thickness of shell plates

1 1/2"

whether punched or drilled

drilled

pitch of rivets

4 1/2"

Lap of plating

13"

size of manholes in shell

16 1/2" x 15"

No. of Furnaces in each boiler

6

description of joint

butt welded

yes

of strength of longitudinal joint

70 to 70

working pressure of shell by rules

111 lbs

size of manholes in shell

16 1/2" x 15"

compensating rings

6 1/2" x 1 1/2"

length, top

5.6"

bottom

5.6"

thickness of plates

7/16"

description of joint

butt welded

rings are fitted

yes

yes

length between rings

—

working pressure of furnace by the rules

132

combustion chamber plating, thickness, sides

3/8"

back

—

top

5/8"

stays are fitted with nuts or riveted heads

yes

working pressure of plating by

134

end plates in steam space, thickness

1 1/2"

how stays are secured

W. H. & M. A. S.

yes

Diameter of stays at smallest part

1 1/2"

working pressure of ditto by rules

103 lbs

diameter of stays at

1 1/2"

working pressure by rules

112 lbs

Front plates at bottom, thickness

3/8"

Back plates, thickness

—

pitch of tubes

2 1/8"

thickness of tube

—

pitch of stays

9 1/4"

yes

Superheater or Steam chest

none

length

—

thickness of plates

—

description of longitudinal joint

—

diam. of rivet holes

—

working pressure of shell by rules

—

diameter of flue

—

thickness of plates

—

If stiffened with rings

—

yes

between rings

—

working pressure by rules

—

end plates of superheater, or steam chest; thickness

—

how stayed

—

Superheater or steam chest; how connected to boiler

—

yes

yes

yes

DONKEY BOILER—

Description

Vertical two crop tubes Steel

Made at *Gateshead*

by whom made

Clark Chapman & Co

when made

11.5.85

where fixed

St. Helens

Working pressure

50 lbs

tested by hydraulic pressure to

100 lbs

No. of Certificate

1848

fire grate area

13.5 sq

description of safety

valves

Spring

No. of safety valves

1

area of each

7.67

if fitted with easing gear

yes

if steam from main boilers can

enter the donkey boiler

no

diameter of donkey boiler

5.0

length

11.0

description of riveting

Lap double

Thickness of shell plates

1/16

diameter of rivet holes

1/16

whether punched or drilled

punched

pitch of rivets

2 1/2

lap of plating

3 1/2

percentage of strength of joint

72 1/2

thickness of crown plates

2

stayed by

4 Stay & dished

Diameter of furnace, top

3.8 1/2

bottom

4.2 1/2

length of furnace

4.6

thickness of plates

3/8

description of joint

Lap Single

Thickness of furnace crown plates

2

stayed by

as above

working pressure of shell by rules

74

Working pressure of furnace by rules

59 lbs

diameter of uptake

12

thickness of plates

3/8

thickness of water tubes

3/8

SPARE GEAR.

State the articles supplied:—

2 Main bearing bolts & nuts, 2 top end bolts & nuts, 2 bottom end bolts & nuts, 1 Set of coupling bolts & nuts, 1 Set of piston Spring, 2 Safety valve Spring, 2 Escape valve Spring, 10 Air pump guards, 1 main boiler check valve & 1 donkey feed check valve, 15 C. tubes, 1 Set of air & circulating pump valves & nuts & iron assorted

The foregoing is a correct description,

Clark Chapman & Co

Manufacturer.

General Remarks

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

The machinery of this vessel has been specially surveyed during construction the material & workmanship good & render the vessel eligible in my opinion to have the Record

10.85 in the Register Book of the Society.

Provided an efficient main discharge valve be fitted as per letter received from the Secretary 28th September 1885.

This discharge valve has now been satisfactorily fitted. Geo. E. Wilkinson

London Oct. 14th 1885

The amount of Entry Fee .. £ 2 : - : - received by me,

Special ..

£ 27 : - : -

Donkey Boiler Fee ..

£ - : - : -

Certificate (if required) ..

£ gratis : -

10th Oct 1885

To be sent as per margin.

(Travelling Expenses, if any, £ ..)

Committee's Minute

13 OCT 1885

Richard Hind
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

