

REPORT ON MACHINERY.

(Received in London Office 11/9/81)

32

Survey held at

Newcastle

Date, first Survey

9 April/80

Last Survey

22 April 1881

on the

Iron Screw Steamer "Huntingdon"

Tons

2224
1464

Hindes

Built at

Newcastle

When built

1881

made at

Newcastle

By whom made

R & W Hawthorn

when made

1881

made at

do

By whom made

do

when made

1881

Horse Power

275

Owners

J. D. Milburn

Port belonging to

London

VES, &c.

on of Engines

Inverted Compound Surface condensing

of Cylinders

26 & 68

Length of Stroke

42

No. of Rev. per minute

60

Point of Cut off, High Pressure

6

Low Pressure

of Screw shaft

12"

Diameter of Tunnel shaft

11"

Diameter of Crank shaft journals

12"

Diameter of Crank pin

12"

size of Crank webs

of screw

16-3

Pitch of screw

16 1/2-6-20 1/2

No. of blades

4

state whether moveable

no

total surface

80 sq ft

Feed pumps

2

diameter of ditto

3 3/4"

Stroke

21

Can one be overhauled while the other is at work

yes

Bilge pumps

2

diameter of ditto

3 3/4"

Stroke

21

Can one be overhauled while the other is at work

yes

to they pump from

the hold, engine space, after hold, tunnel well & all the tanks

Donkey Engines

Two

Size of Pumps

8x14 1/2 3/2 x 8

Where do they pump from

the hold, engine space

the bilge suction pipes fitted with roses

yes

Are the roses always accessible

yes

Are the sluices on Engine room bulkheads always accessible

yes

Are the sluices on Engine room bulkheads always accessible

yes

bilge injections

1

and sizes

4"

Are they connected to condenser, or to circulating pump

no

the pumps worked

Lever from L T Cylinder over condenser

connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

Valves & Cocks

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Are they Valves or Cocks

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

above

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Is 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

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Are they protected

none

How are they protected

none

How are they protected

none

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none

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none

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

yes

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Boilers

Two

Description

Cylindrical, return tubes

"Steel" Boilers

Pressure

80 lbs

Tested by hydraulic pressure to

160 lbs

Date of test

15th February 1881

15th February 1881

on of superheating apparatus or steam chest

none

Can the superheater be shut off and the boiler worked separately

yes

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Diameter of tub $1\frac{1}{2}$ pitch of $1\frac{3}{4}$ thickness of tube plates, front $\frac{1}{16}$
 Diameter of Superheater or Steam chest $19\frac{1}{2} \times 19\frac{1}{2}$ width of water space $19\frac{1}{2}$
 Thickness of plates $\frac{1}{16}$ description of longitudinal joint $\frac{1}{16}$ diameter of rivet holes $\frac{1}{16}$ pitch of rivets $\frac{1}{16}$
 Working pressure of shell by rules $\frac{1}{16}$ Diameter of flue $\frac{1}{16}$ thickness of plates $\frac{1}{16}$
 If stiffened with rings $\frac{1}{16}$ distance between rings $\frac{1}{16}$ Working pressure by rules $\frac{1}{16}$
 End plates of superheater, or steam chest; thickness $\frac{1}{16}$ How stayed $\frac{1}{16}$
 Superheater or steam chest; how connected to boiler $\frac{1}{16}$

DONKEY BOILER— Description *Centric of Anderson*
 Made at *Newcastle* By whom made *Clark Chapman & Gurney* made *22nd November 1880.*
 Where fixed *Stokehold* Working pressure *80 lbs* Tested by hydraulic pressure to *160 lbs* No. of Certificate *586*
 Fire grate area *21.87 sq ft* Description of safety valves *1 Spring* No. of safety valves *one* area of each *11th inch*
 If steam from main boilers can enter the donkey boiler *no*
 Diameter of donkey boiler *24th inch* length *16-6* description of riveting *Double Lap*
 thickness of shell plates *$\frac{1}{16}$* diameter of rivet holes *$\frac{1}{8}$* whether punched or drilled *punched*
 pitch of rivets *$3\frac{1}{4}$* lap of plating *$3\frac{1}{8}$* per centage of strength of joint *75*
 thickness of crown plates *$\frac{9}{16}$* stayed by *Washed to 5th radius & 6 Stays $1\frac{1}{4}$ diameter*
 Diameter of furnace, top *4-9* bottom *5-5* length of furnace *5-9*
 thickness of plates *$\frac{9}{16}$* description of joint *6 Stays $1\frac{1}{4}$ diameter (Single Lap)*
 thickness of furnace crown plates *$\frac{9}{16}$* stayed by *Washed to 5th radius & 6 Stays $1\frac{1}{4}$ diameter*
 Working pressure of shell by rules *79 lbs* working pressure of furnace by rules *80 lbs*
 diameter of uptake *16* thickness of plates *$\frac{3}{8}$* thickness of water tubes *$\frac{3}{8}$*

The foregoing is a correct description of Engine & Boiler
 of which *W. H. Hawthorn* are Manufacturers - who know nothing of Registered Marine Engineers

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

The Machinery of this vessel has been specially examined
 during construction. The materials and workmanship
 are sound and satisfactory and eligible in my
 opinion to have the notation *+* & Class *M.C.*
 in the *Lloyd's Register of Shipping*.

The amount of Entry $\pounds 3 : -$ received by me,

Special $\pounds 33 : 15$:-

Certificate (if required) \pounds *July 1881*

Travelling Expenses, if any, \pounds

Committee's Minute

John Brockat
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

North Shields
 Lloyd's Register
 Foundation