

pt. 4.
received from
Surveyor.
7 - JAN. 1901

TUES. JAN 22 1901

Elms No. 18596
Gms 966

REPORT ON MACHINERY.

TUES. JAN 15 1901

Port of Glasgow & Grimsby

No. in Survey held at
Reg. Book.

Glasgow & Grimsby

Date, first Survey 4 June 1899

Received at London Office

Last Survey 27 January 1901

5 in Supr. on the

S.S. "KING CHARLES."

(Number of Visits)

Elms 15

Gross 163
Net 74
When built 1901

Master H. Browning

Built at

Grimsby

By whom built Hagerup Doughty, Schopfield

Engines made at

Glasgow

By whom made

Muir & Houston Ltd

when made 1900

Boilers made at

Grimsby

By whom made

Schopfield, Hagerup & Doughty, Ltd

when made

Registered Horse Power

Owners Monarch Steam Fishing Co. Ltd.

Port belonging to

Grimsby

Nom. Horse Power as per Section 28

46

Is Refrigerating Machinery fitted

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple expansion, screw

No. of Cylinders

3

No. of Cranks 3

Dia. of Cylinders 11" 17" 28"

Length of Stroke

20"

Revs. per minute

5.4

Dia. of Screw shaft

5.68

Lgth. of stern bush 1' 11"

Dia. of Tunnel shaft

as per rule

none

Dia. of Crank shaft journals

as per rule

5.4

Dia. of Crank pin

5.78

Size of Crank webs

3.78

Dia. of thrust shaft under

collars 5.58

Dia. of screw

8" 0"

Pitch of screw

9" 0" to 10" 0"

No. of blades 4

State whether moveable no

Total surface 21 sq. ft.

No. of Feed pumps 1

Diameter of ditto

2"

Stroke

10"

Can one be overhauled while the other is at work ✓

No. of Bilge pumps 1

Diameter of ditto

2 1/4"

Stroke

10"

Can one be overhauled while the other is at work ✓

No. of Donkey Engines One

Sizes of Pumps

5" x 2 1/2" x 5"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

2" Sea, Bilge (2) Howell

In Holds, &c. 2" - Fish Hold

No. of bilge injections one sizes 2 1/2"

Connected to condenser, or to circulating pump are pump Is a separate donkey suction fitted in Engine room & size 2 1/2" also

Are all the bilge suction pipes fitted with roses Yes

Are the roses in Engine room always accessible Yes

Are the sluices on Engine room bulkheads always accessible None

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

Are they Valves or Cocks Valves & Cocks

Are they fixed 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 Awash

Are they 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

What pipes are carried through the bunkers

Fish Hold suction

How are they protected Heck casing

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

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes

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

Is the screw shaft tunnel watertight None

Is it fitted with a watertight door ✓

worked from ✓

BOILERS, &c.—

(Letter for record S)

Total Heating Surface of Boilers 836 sq. ft.

Is forced draft fitted No

No. and Description of Boilers One - Cylindrical Multitubular

Working Pressure

180 lb

Tested by hydraulic pressure to 360 lb

Date of test 1/2/00 Can each boiler be worked separately ✓

Area of fire grate in each boiler 28 sq. ft.

No. and Description of safety valves to

each boiler 2 - Direct Spring

Area of each valve

3 1/4 sq. in.

Pressure to which they are adjusted

182 lb sq. in.

Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

7 1/2"

Mean dia. of boilers

10' 6"

Length

9' 0"

Material of shell plates Steel

Thickness

9/32

Range of tensile strength 28/32 ton

Are they welded or flanged Welded

Descrip. of riveting: cir. seams DR lap long. seams TR-double strap

Diameter of rivet holes in long. seams

1/8"

Pitch of rivets

7 1/2"

Lap of plates or width of butt straps

17"

Per centages of strength of longitudinal joint

87

Working pressure of shell by rules

183 lb per sq. in.

Size of manhole in shell

16" x 12"

Size of compensating ring Patent Ring

No. and Description of Furnaces in each boiler

2 - Plain

Material Steel

Outside diameter 3' 3"

Length of plain part

5' 10"

Thickness of plates

3/4"

Description of longitudinal joint

Weld

No. of strengthening rings none

Working pressure of furnace by the rules

192 lb

Combustion chamber plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

7/8"

Pitch of stays to ditto: Sides

7 1/4" x 7 1/4"

Back

7 1/4" x 7 1/4"

Top

7 1/4" x 7 1/4"

If stays are fitted with nuts or riveted heads None

Working pressure by rules 182 lb

Material of stays Steel

Area at smallest part

1.45 sq. in.

Area supported by each stay 60.06 sq. in.

Working pressure by rules

192 lb

End plates in steam space:

Material Steel

Thickness

15/16"

Pitch of stays

15" x 15"

How are stays secured Nuts

Working pressure by rules

185 lb

Material of stays

Steel

Area at smallest part 4.37 sq. in.

Area supported by each stay

225 sq. in.

Working pressure by rules

194 lb

Material of Front plates at bottom Steel

Thickness

11/16"

Material of Lower back plate

Steel

Thickness

7/8"

Greatest pitch of stays

9 1/2"

Working pressure of plate by rules 188 lb

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2"

Material of tube plates

Steel

Thickness: Front

11/16"

Back

11/16"

Mean pitch of stays

9"

Pitch across wide water spaces

14"

Working pressures by rules

182 lb

Girders to Chamber tops: Material

Iron

Depth and

thickness of girder at centre

2 - 7" x 7 1/8"

Length as per rule

27"

Distance apart

7 1/2"

Number and pitch of Stays in each

2 - 7 1/4"

Working pressure by rules

197 lb

Superheater or Steam chest; how connected to boiler

None

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

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

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Lloyd's Register
Foundation

W869-0015

DONKEY BOILER— No. Description
Made at By whom made When made Where fixed
Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves
No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler
Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength
Descrip. of riveting long seams Rivets Thickness of shell crown plates Radius of do. No. of Stays to do.
Lap of plating Per centage of strength of joint Plates Thickness of furnace plates Description of joint
Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Working pressure of shell by rules
Thicknes of furnace crown plates Stayed by Working of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPA GEAR. State the articles supplied:— 2 each top end, bottom end & main bearing bolts & nuts, 1 set of coupling bolts & nuts, 6 piston bolts, 6 cylinder cover studs & nuts, 6 stuffing box studs & nuts, complete set of pump valves, escape & safety valve springs, assorted bolts & nuts, iron of various sizes condenser tubes and ferrules, tube stoppers, tools &c.

The foregoing is a correct description,

ER PRO. SCHOFIELD, HAGERUP AND DOUGHTY, LTD.

For MUR & HOUSTON, LIMITED,

Manufacturer.

Dates of Survey while building
During progress of work in shops—
During erection on board vessel—
Total No. of visits

1900: June. 4. July. 31. Sept. 10. Oct. 3. 10.

£7. 5s
£15

1899 Aug 21, Sept 1, Oct 3, 12, 17, Nov 1, 21, Dec 4, 15,
1900 Jan 2, Feb 1, Nov 19, Dec 29,
1901 Jan 7, 14

Is the approved plan of main boiler forwarded herewith

donkey

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

These engines have been constructed under Special Survey, the material & workmanship are of good quality, and in my opinion, are eligible to be classed in the Register Book when they have been fitted on board, with the boiler at Grimsby. This Boiler has been constructed under Special Survey. The steel has been tested as required by the Rules. The workmanship is good. The Engines and Boiler have been satisfactorily fitted on board the vessel and tried under steam. They are eligible, in my opinion, to be classed in the Register Book with record of +LMC 11-00 last survey June 1901. The Boiler is in accordance with the approved plan and the Secretary's letter (E) of 13/5/98.

It is submitted that this vessel is eligible for THE RECORD. +LMC. 1-00.

22-1-07

22.1.01

The amount of Entry Fee, £ 5 :
Special .. £ 3 :
Donkey Boiler Fee .. £ :
Travelling Expenses (if any) £ :

When applied for,

11/11/00 £15 Paid 16/11/01

21/1/01 £15

When received,

13/5/01 £15

J. W. Dimmock B. B. G. Oxford
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute Glasgow. 14 JAN. 1901

Assigned

Deferred for completion

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