

REPORT ON MACHINERY.

No.

9517

Port of

Hull

Received at London Office

THURS. 21 MAR 1895

No. in Survey held at

Hull

Date, first Survey

Nov. 28/94

Last Survey

Mar. 16th

1895

eg. Book.

45 on the

No. 1200

"MONARCH"

(Number of Visits 14)

Tons { Gross 130
Net 47

Master

Built at

Berkeley

By whom built

Cochrane & Cooper

When built

1895

Engines made at

Hull

By whom made

C. A. Holmes & Co.

when made

1895

Boilers made at

Hull

By whom made

do.

when made

1895

Registered Horse Power

40

Owners

Anchor Steam Towing Co. Port belonging to

Grimsby

nom. Horse Power as per Section 28

41

ENGINES, &c.—

Description of Engines

Triple Exp. direct acting

No. of Cylinders

3

Diameter of Cylinders

11 x 17 x 28

Length of Stroke

21

Revolutions per minute

118

Diameter of Screw shaft

as per rule 5.4
as fitted 5.13/16

Diameter of Tunnel shaft

as per rule 5.1
as fitted 5.1/2

Diameter of Crank shaft journals

5 3/4

Diameter of Crank pin

5 3/4

Size of Crank webs

4 1/8 x 5 7/8

Diameter of screw

10-16 9-4 1/2

Pitch of screw

7-10

No. of blades

4

State whether moveable

no

Total surface

21 1/2

No. of Feed pumps

one

Diameter of ditto

15 7/8

Stroke

21

Can one be overhauled while the other is at work

✓

No. of Bilge pumps

one

Diameter of ditto

2

Stroke

21

Can one be overhauled while the other is at work

✓

No. of Donkey Engines

one

Sizes of Pumps

2 1/2 x 5 double acting

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

Engine Room

2- 2-dia.

In Holds, &c.

one 2-dia.

No. of bilge injections

1 sizes 3"

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size

6.5 dia.

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

yes

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

yes

Are they Valves or Cocks

both

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

yes

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

held suction

How are they protected

wood cases

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

new

Is the screw shaft tunnel watertight

no tunnel

Is it fitted with a watertight door

✓

worked from

✓

BOILERS, &c.—

(Letter for record S)

Total Heating Surface of Boilers

663 1/2

No. and Description of Boilers

one cyl. mult.

Working Pressure

160

Tested by hydraulic pressure to

320

Date of test 22-2-95 Can each boiler be worked separately

✓

Area of fire grate in each boiler

22 1/2

No. and Description of safety valves to

each boiler

two spring loaded

Area of each valve

3-4 1/2

Pressure to which they are adjusted

165

Are they fitted

with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

7"

Mean diameter of boilers

10'-0"

Length

9'-3"

Material of shell plates

steel

Thickness

27/32

Description of riveting: circum. seams

6-R-rod

long. seams

10-R-rod

Diameter of rivet holes in long. seams

15/16

Pitch of rivets

6 15/16

Lap of plates or width of butt straps

14 1/4"

Per centages of strength of longitudinal joint

88 7/10

Working pressure of shell by rules

164

Size of manhole in shell

16 x 12"

Size of compensating ring

6 x 27/32

No. and Description of Furnaces in each boiler

2 Holmes

Material

steel

Outside diameter

35"

Length of plain part

top 14 1/2
bottom 14 1/2

Thickness of plates

1 1/2

Description of longitudinal joint

welded

No. of strengthening rings

4

Working pressure of furnace by the rules

160

Combustion chamber plates: Material

steel

Thickness: Sides

9/16

Back

9/16

Top

9/16

Bottom

10/16

Pitch of stays to ditto: Sides

8"

Back

8"

Top

7 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

171

Material of stays

5/16 1/4

Diameter at smallest part

1 3/8"

Area supported by each stay

8 x 7 1/2

Working pressure by rules

183

End plates in steam space:

Material

steel

Thickness

7/8"

Pitch of stays

14 3/4"

How are stays secured

nuts

Working pressure by rules

167

Material of stays

steel

Diameter at smallest part

2-3

Area supported by each stay

14 3/4"

Working pressure by rules

171

Material of Front plates at bottom

steel

Thickness

1 1/16

Material of Lower back plate

steel

Thickness

1 1/16

Greatest pitch of stays

8"

Working pressure of plate by rules

160

Diameter of tubes

3 1/4

Pitch of tubes

4 3/4"

Material of tube plates

steel

Thickness: Front

1 1/16

Back

1 3/16

Mean pitch of stays

9 1/2"

Pitch across wide water spaces

13 1/4

Working pressures by rules

160 1/2

Girders to Chamber tops: Material

iron

Depth and

thickness of girder at centre

7 x 7 1/8"

Length as per rule

29 1/4"

Distance apart

7 3/8

Number and pitch of Stays in each

3

Working pressure by rules

164

Superheater or Steam chest; how connected to boiler

DONKEY BOILER—

Description

No broken boiler

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 _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of
 joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *2 top end bolts nuts, 2 bottoms end bolts nuts*
2 main bearing bolts nuts, 1 set coupling bolts, 1 set feed pump valves
1 set bilge pump valves, 1 safety valve spring, 1 st. check valve
The vessel is provided with masts sails as a trawler.

The foregoing is a correct description,

Charles D. Holmes & Co. Manufacturer.

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

Good.

The machinery of this vessel has been constructed under special survey and placed on board in accordance with the Society's Rules, and is in my opinion eligible for the notification + L.M.C. 3-95 in the Register.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 3-95

The Surveyor is requested to give the date of the hydraulic test of the main boiler

*H.A.
21-3-95*

Certificate (if required) to be sent to _____

The amount of Entry Fee.	£ 1 : 0	When applied for,
Special	£ 8 : 0	29/3/95
Donkey Boiler Fee	£ ✓	When received,
Travelling Expenses (if any) £ ✓		28/3.18.95

Committee's Minute

FRIDAY 22 MAR 1895

Assigned

+ L.M.C. 3,95

H.R. Cornish
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

VI

*** These particulars are to be filled in by the owner or charterer.

Signal Letter _____

Official Number _____

104196

No., Date, and _____

Whether British or Foreign Built _____

British

Number of Deck _____

Number of Masts _____

Rigged _____

Stern _____

Build _____

Galleries _____

Head _____

Framework and vessel _____

Number of Bulwarks _____

Number of watertight bulkheads and their capacity _____

Total tonnage at side amidships _____

No. of Engines _____

De _____

Influence of direct wind _____

One _____

Number of Iron or Steel Pressure _____

Under Tonnage _____

Closed-in space _____

Space or space _____

Poop _____

Forecastle _____

Round House _____

Other closed spaces _____

Space _____

Gross _____

Deductions, and _____

Reg _____

Name of _____

No. of Owners _____

Name, Residence _____

The _____

Dated 13 _____